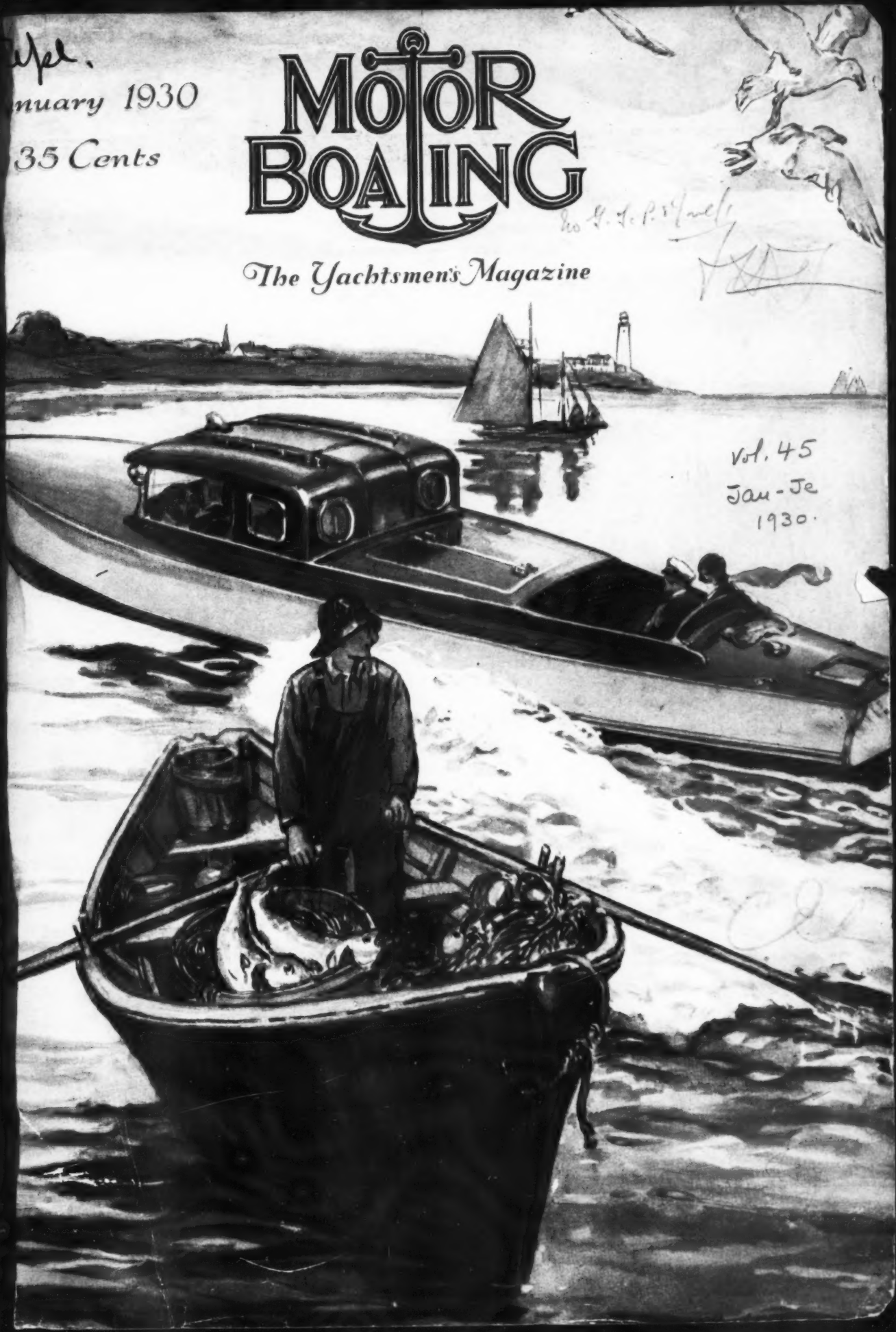
...pel.
...nuary 1930
35 Cents

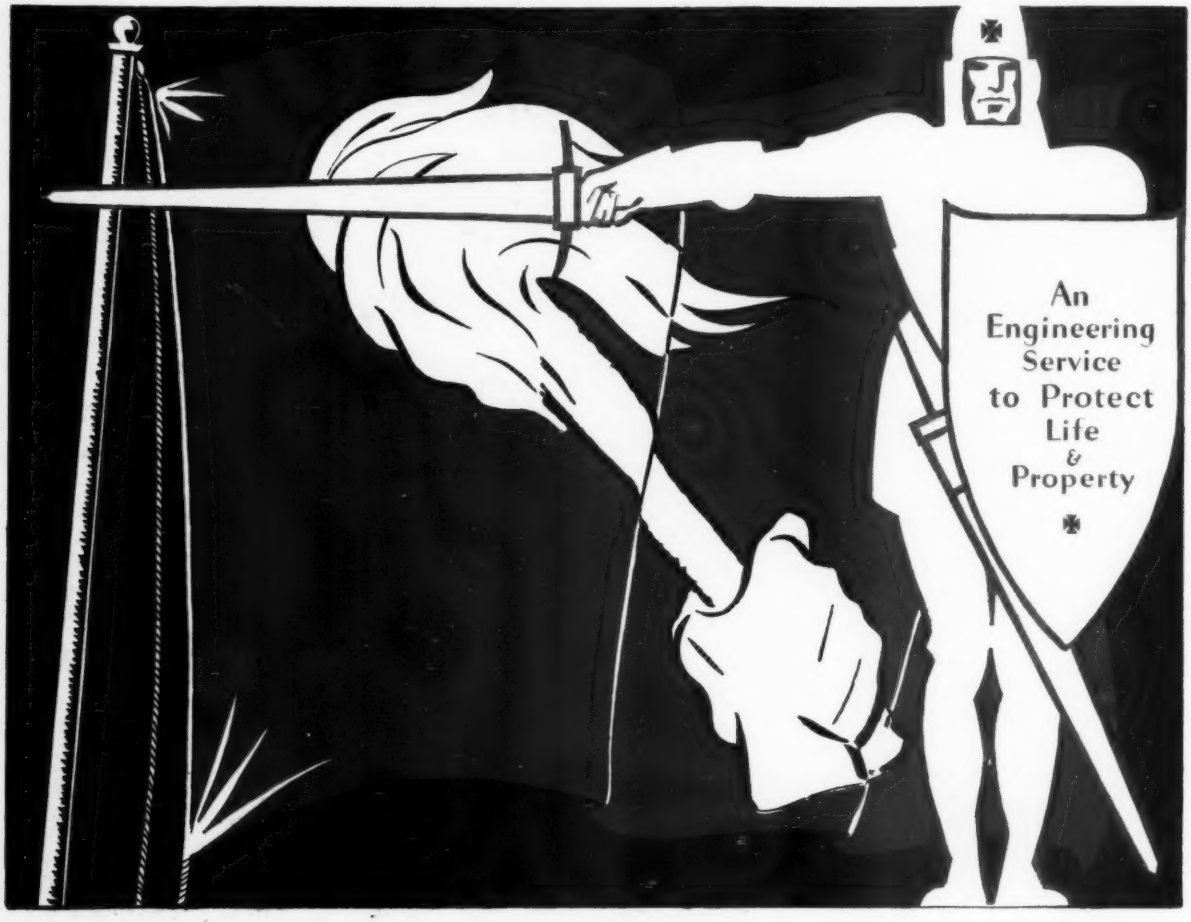
MOTOR BOATING

The Yachtsmen's Magazine



Vol. 45
Jan-Je
1930.

FIRE — AN INCIDENT OR A DISASTER ?



The pirate who runs up a red flag!

Pirates! Once the ruthless lords of the 7 seas—now only picturesque prisoners bound within the covers of books! All gone—all futile save one—the Fire Pirate who still sails wherever ships sail—waiting to run up his Red Flag and capture another victim!

Every boat that cuts its way through water—be it a de luxe express crossing the ocean—or a motor boat singing its way across an inland lake—needs ALFITE protection against Fire.

Fire is always an incident when the boat is guarded with an ALFITE system. As easy to operate as your steering wheel—simply pull a lever—the system goes into action and the fire goes out! Simple! Moderately priced! Infallible! Instantaneous!

American-La France and Foamite Corporation, Engineers and Manufacturers, Dept. S14, Elmira, N. Y.

AMERICAN-LA FRANCE AND FOAMITE PROTECTION

A Complete Engineering Service

For Extinguishing Fires

"One Fire is Too Many" is a booklet telling the whole story in an easily understandable way. Send for it—it's free

Johnson's New 20-ft. Aquaflyer Runabout

Johnson MATCHED UNITS

Sea-Horse Motors and Hulls
Complete Outboard Motor Boats

Boats of New-day Sealite Construction Guaranteed to Outlast the Ordinary

Johnson, world's leading maker of outboard motors, now offers you boats designed and built to develop the maximum speed and performance of outboard power plants, and to give you far more service and pleasure with far less attention and expense.

The advantages of their new-day Sealite construction and design are many and amazing, and equally as important in small boats as in large roomy runabouts for family use.

But half the weight of comparable wooden boats in water service, they are not only more easily handled, but also much faster with the same power plant.

Sealite is waterproof, seamless, and absolutely impervious to seepage and absorption. This means that your Johnson Boat is unaffected by water, weather or storage, never leaks or warps, never grows slow and sluggish, requires no bailing, no attention and no care. As to strength and durability, Johnson Boats of Sealite construction are guaranteed to outlast any comparable boat of ordinary construction.

While these new-type boats will vastly improve the performance of any outboard motor, when matched to Johnson Sea-Horses, they provide the ultimate in outboard motoring.

Sea-Horse Motors, too, appear in 1930 with revolutionary improvements. Some of their more outstanding features are given elsewhere on this page.

1930 Color-illustrated Catalog Ready—Write! Whatever size motor or boat you want, there is one ideally suited to your purpose in the Johnson line. Send for color-illustrated catalog fully describing Johnson Sea-Horses, Boats and Matched Units. Simply mail the coupon.

JOHNSON MOTOR COMPANY, 3099 Pershing Rd., Waukegan, Ill. *In Canada:* Canadian Johnson Motor Co., Ltd., Peterboro, Ont. *Distributors for British Columbia:* Hoffar's Ltd., Vancouver, B. C.

At the 25th Annual Motor Boat Show, New York, January 17th to 25th inclusive, Grand Central Palace, visit the Johnson exhibit, Space 409, 4th floor, and also entire lobby of the Astor Hotel, 45th and Broadway.

JOHNSON SEA-HORSES & BOATS

World's only manufacturer of outboard matched units, and largest maker of outboard motors. Originator of Water-cooled Underwater Exhaust and Release Charger

Johnson SEA-HORSE Features

Automobile Starting Ease by new ALTERNATE FIRING in Sea-Horses "4" and "12" and famous RELEASE CHARGER in Sea-Horses "2," "10," "16," "24" and "32."

•

World's Lightest Motor—Sea-Horse "Single," 27 lbs.

•

World's Fastest Motor—Sea-Horse "32," 43.4 m. p. h.

•

World's Fastest Class B Motor—Sea-Horse "12," 42.37 m. p. h.

•

Alternate Firing of "4" and "12" introduces 2 impulses per revolution in a twin-cylinder outboard with smoothness hitherto unknown.

•

Rotary Valve achieves delivery of full, even gas charge to each cylinder.

•

Water-cooled Underwater Exhaust frees passengers of noise and fumes.

•

Automatic Back-pressure Relief.

•

Full Pivot Steering.

•

Pressure-vacuum Cooling System.

Johnson BOAT Features

Built of a new-day Sealite waterproof construction—guaranteed to outlast any comparable boat of ordinary construction.

•

Weighs only half as much as ordinary wooden boats, size for size, after being in water service. Faster with the same power.

•

Waterproof—always dry and comfortable—will not absorb water and are non-warping. No seams, no calking.

•

Longer life—unaffected by weather or water—as seaworthy in storage as in use.

•

No care—dealers can carry these boats indefinitely with no depreciation.

•

Designed exactly for Johnson Sea-Horses—hence give the ultimate in outboard motoring performance.

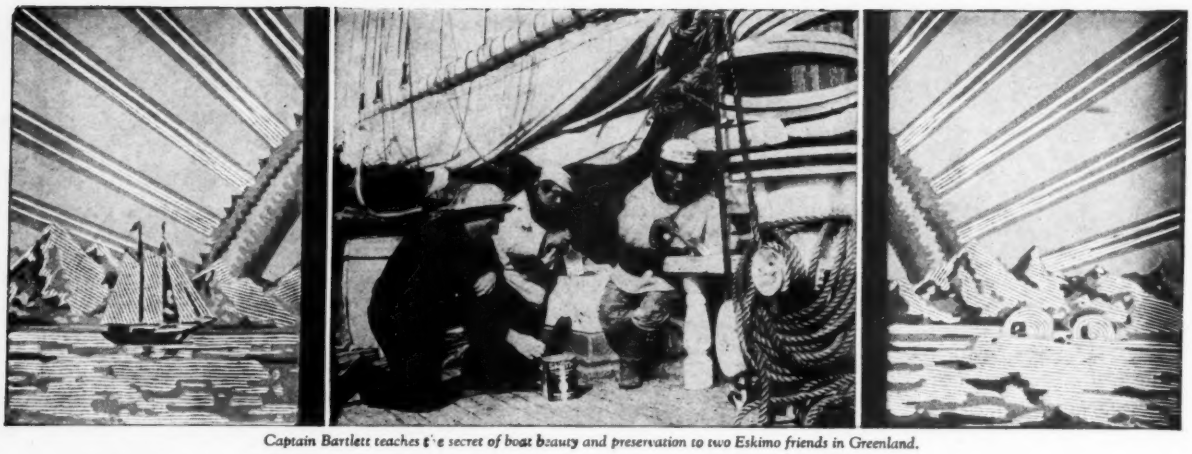
JOHNSON MOTOR CO.
3099 Pershing Rd., Waukegan, Ill.
Gentlemen—Kindly send Catalog of 1930 Johnson Sea-Horses and Boats.

Name _____

Address _____

City _____ *State* _____

MOTOR BOATING, January, 1930. Volume XLV, No. 1. Published monthly at 57th Street at Eighth Avenue, New York, U. S. A., by International Magazine Co., Inc. Yearly subscription price: United States, $3.00; Canada, $3.00; Foreign, $4.00. Entered as second-class matter April 15, 1925, at the Post Office at New York, under the act of March 3, 1879. (Printed in U. S. A.)



Captain Bartlett teaches the secret of boat beauty and preservation to two Eskimo friends in Greenland.

When the veteran Schooner "Morrissey" sails the Arctic Seas!

...Peary's old ship is protected from the rigors of wind and water with

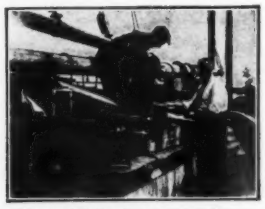
EDWARD SMITH PAINTS & VARNISHES!

CAPTAIN BOB BARTLETT, hero of many Polar trips and skipper of the "Morrissey", says of these famous marine specialties:

"I want to tell you how good your paint was that we used this summer on the "Morrissey". You know that going into the Arctic, knocking around as we do, one day it is among walrus, another day among seals, another day among polar bears, another day amongst eskimos; this means a lot of running around hoisting in boats, moving barrels and different things around the decks... On my return to Newfoundland, some paint critics came aboard, and I wish you could hear the complimentary remarks they made on the appearance of the inside... as well as the outside of the vessel. Another thing, the "Morrissey" is no chicken, therefore, the good appearance of the paint tells the tale."

In preparation for the hazardous trip; painting the hull before sailing.

The decks, too, are made ready for a long, hard trip.



Captain Bob Bartlett supervises the unloading of the supply of EDWARD SMITH Paints and Varnishes.

Which, indeed, it does—a tale of beauty of finish and resistance to wear attested to by four generations of boat owners and builders!

EDWARD SMITH & COMPANY

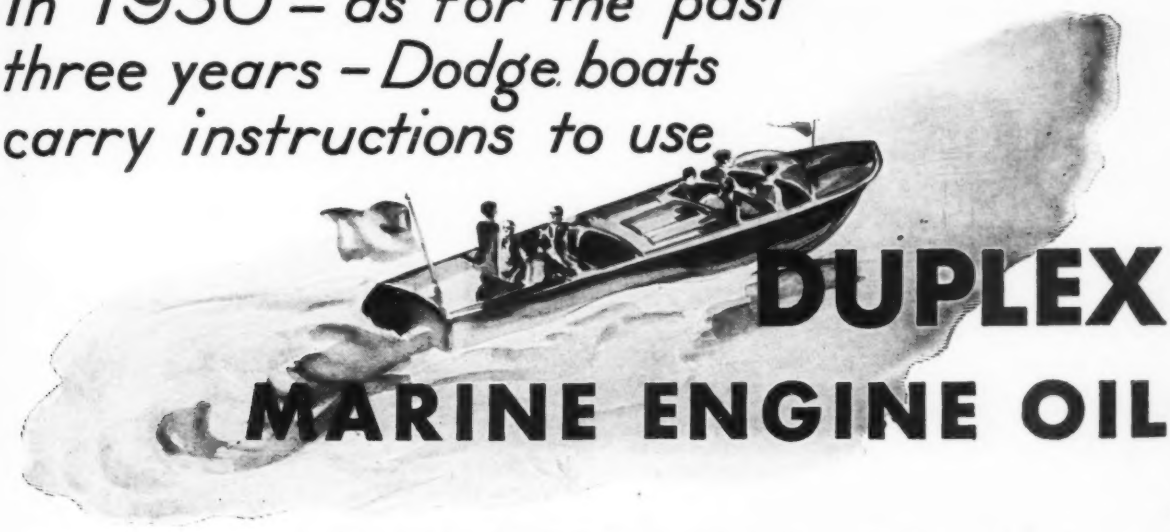
LONG ISLAND CITY, N. Y.

Makers of Marine Paints and Varnishes since 1827

Advertising index will be found on 3rd last page

DODGE

In 1930 – as for the past three years – Dodge boats carry instructions to use



DUPLEX MARINE ENGINE OIL

In the words of the Dodge organization, their continued use of DUPLEX "has been occasioned by the excellent results achieved with your marine lubricants. Tests have led us to believe that Duplex Oil affords greater smoothness, more power, and extreme freedom from the usual ailments of a marine motor—such as valve grinding and carbon troubles.

"You have a very fine product, and we are delighted to recommend its use to all Dodge owners."

DUPLEX MARINE ENGINE OIL is specified by the builders of 85% of all fine standardized boats built in America.

Made by

ENTERPRISE OIL COMPANY, INC.,
Established 1884
BUFFALO, New York

Makers also of Duplex *Motor* Oil . . . Serving Pierce-Arrow for 30 years . . . and Kasson Waterproof Grease.

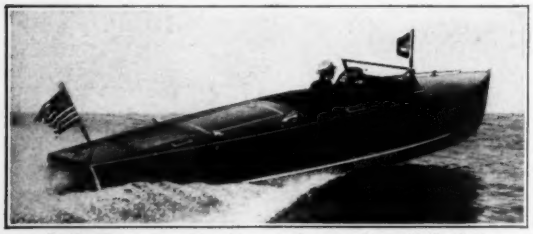
WHOLESALE DISTRICT DISTRIBUTORS IN
Baltimore Boston Chicago Cleveland Detroit Houston Miami New Orleans New York Palm Beach Philadelphia St. Louis
Pacific Coast Distributors: **Portland, *Beebe & Co.;* San Francisco, *John F. Blain.;* Seattle, *Sunde & d'Evers Co.;***
Vancouver, *Hoffars, Ltd.;* Wilmington (Calif.), *Ets—Hokin & Galvan*
DEALERS WHEREVER BOATS FLOAT

SIMULTANEOUSLY *on Display* NEW YORK·· BOSTON·· CHICAGO

The new 38 foot V bottom Hacker commuter—a 42 mile an hour twin screw Kermath powered boat, sleeping 4 . . . . $17,000 f. o. b. factory

The 30 foot Hackercraft—an 11 passenger genuine mahogany runabout with 42 m. p. h. from the "200" Kermath . . . . $5,500 f. o. b. factory

Hackercraft announce speeds in excess of 44 miles per hour for the 1930 Kermath powered 26 footer—a 10 passenger speed champion . . . . $4,475 f. o. b. factory



Built of genuine Honduras mahogany beautifully fashioned, the new 24 foot Hackercraft is Gray eight powered for 35 m. p. h. . . . . $3,150 f. o. b. factory

January 17th to 25th Motor Boat Show Week

Right now, of course, you won't be able to test the fleet buoyant speeds of the new 1930 Hackercraft models—or their superb riding form and easy handling qualities . . . But you *are* invited to inspect the visible superiorities of these beautiful boats . . . Note the new improvements and refinements in hull lines and contours . . . Observe those nicities of design and workmanship so eloquent of John Hacker's quality standards. To help you, the new Hackercraft models will be simultaneously displayed at the New York Motor Boat Show, and also in Boston and Chicago. You can leisurely check every phase of design and construction — carefully compare values — examine that brilliant record of Hackercraft racing achievements. Thus you will learn first hand what thousands of boat owners concede to Hacker design. You will discover why Hackercraft can be depended upon to provide a superior degree of performance and a lasting sense of satisfaction. Full details will be supplied all those interested in a comparison of values.

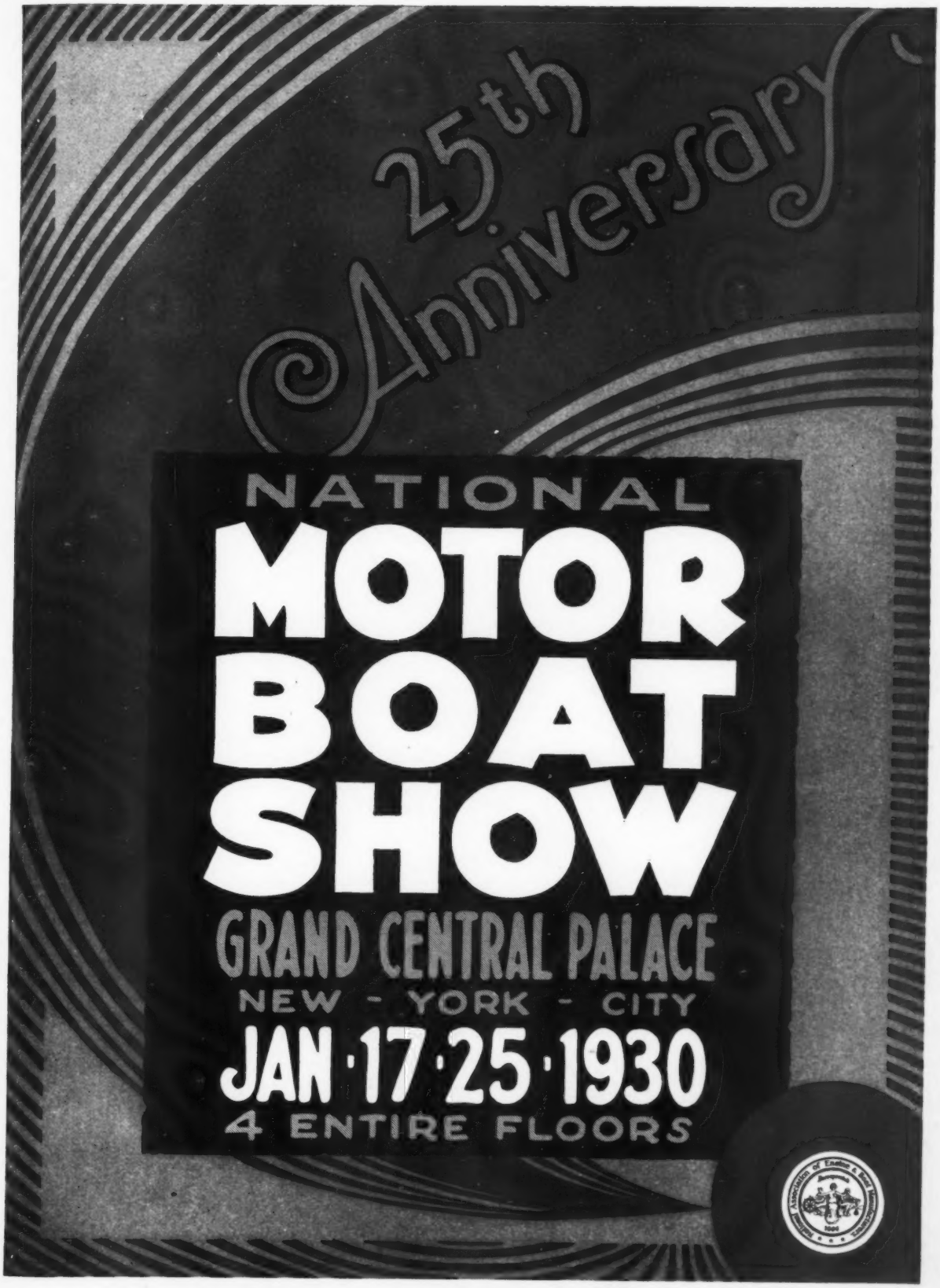
On Display

NEW YORK: 5th Avenue at 15th Street
BOSTON: 1043 Commonwealth Avenue
CHICAGO: Motor Boat Mart, Navy Pier

HACKER BOAT COMPANY
530 River Drive + Mount Clemens, Michigan

HACKERCRAFT *for* 1930

Advertising index will be found on 3rd last page



The Show will not be open Sunday, January 19th, 1930

Boat Builders' Acceptance best assurance of battery value

Chris-Craft uses this battery

Willards with Thread-Rubber Insulation have been chosen as original equipment for all battery-equipped Chris-Craft. Thread-Rubber is dependable insurance against insulation troubles, even in the face of persistent overcharging on long runs. Willard constant quality, guarded by 69 factory inspections and tests, means freedom from premature plate failure.

More than a dozen leading boat builders have chosen Willard Batteries as original equipment for their craft. Sound engineering principles guided their selection. Dependability, electrical capacity, output . . . had to be demonstrated before their eyes. The *lower cost of owning Willards* had to be proved.

When you replace your battery take advantage of their experience. Get a Willard of the proper electrical size. You will spare yourself inconvenience as well as needless expense.

STORAGE BATTERIES

Willard

CLEVELAND·OHIO

Advertising index will be found on 3rd last page

Smooth as a Gull in Flight

With its engine humming quietly and without effort the Cooper-Bessemer diesel powered yacht glides gracefully through the water—smooth as a gull in flight. On deck or in the staterooms, you would never realize that a powerful engine is driving the ship, so noiseless and vibrationless is Cooper-Bessemer's performance. » » »

THE COOPER-BESSEMER CORPORATION

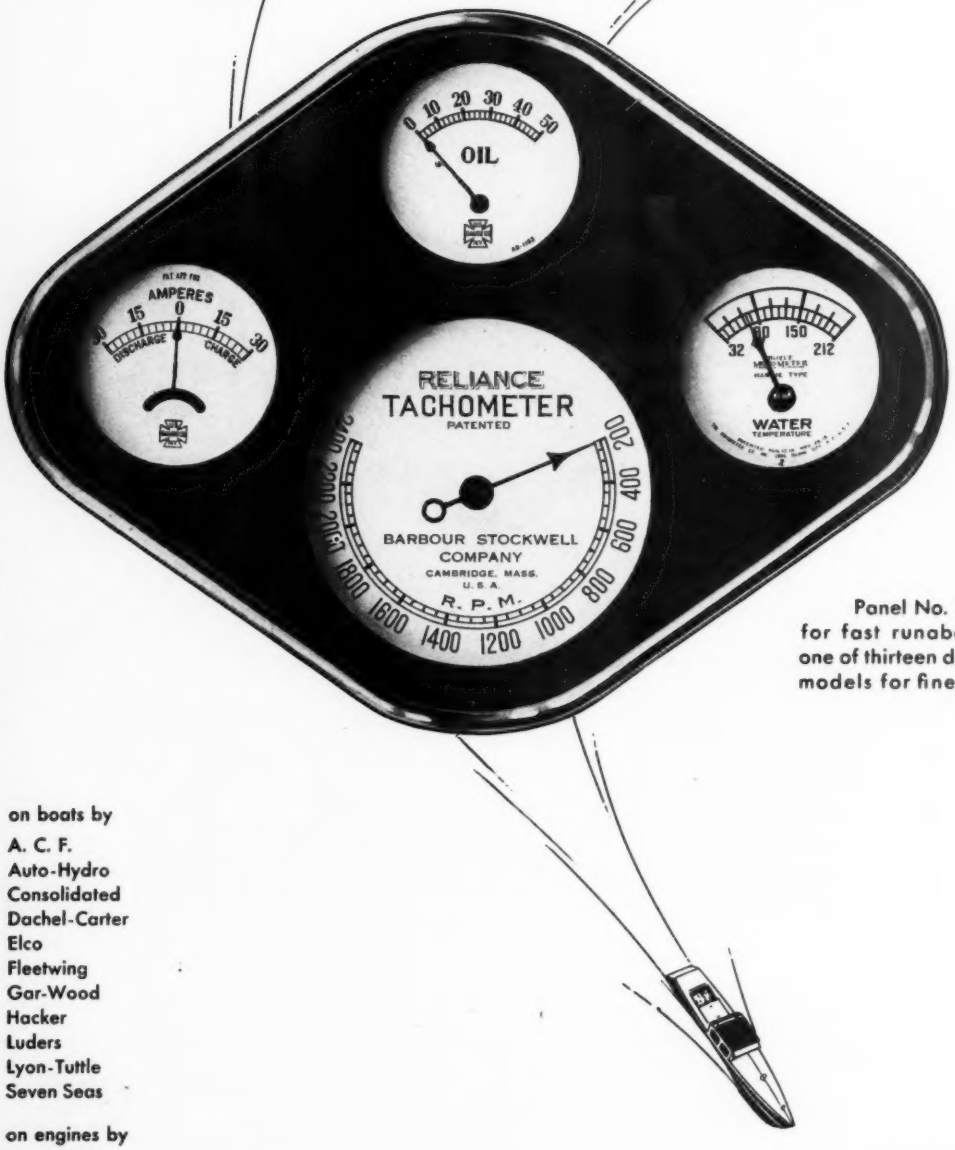
General Diesel Sales Offices: 25 West 43rd Street, Suite 301, New York City
Special Yacht Representative: EARL H. CROFT, 25 W. 43rd Street, New York City

COOPER-BESSEMER

DIESEL MARINE ENGINES

"POWERING AMERICA'S FINEST YACHTS"

D E P E N D A B L E



Panel No. 3
for fast runabouts—
one of thirteen de-luxe
models for fine craft.

on boats by

A. C. F.
Auto-Hydro
Consolidated
Dachel-Carter
Elco
Fleetwing
Gar-Wood
Hacker
Luders
Lyon-Tuttle
Seven Seas

on engines by

Bessemer
Buda
Buffalo
Hall-Scott
Sterling
Winton
Wright

RELIANCE
PANELS and TACHOMETERS

BARBOUR STOCKWELL COMPANY · CAMBRIDGE · MASSACHUSETTS

Only Elco's thirty-seven years' experience could make possible so noteworthy an achievement as the 1930 Elco Fleet

THERE are far-reaching changes in arrangement and design, important refinements in appearance and style, significant advances toward the ultimate in beauty, in safety, in comfort and livability —*but not one change that is speculative or untried, that has not been completely proved in actual experience.*

Elco standardization policies and Elco construction standards remain unchanged. Quality and craftsmanship continue in command.

The Elco exhibit will be one of the outstanding features at the Twenty-fifth Anniversary National Motor Boat Show at Grand Central Palace, New York City, January 17th to 25th. You will be most welcome.

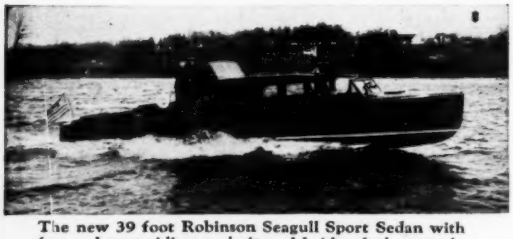
The Water-mark of Quality

Elco cruisers are on permanent display at Port Elco, 247 Park Avenue, at 46th Street, New York City (Plant and Marine Basin at Bayonne, New Jersey)

The 45 foot twin screw Seagull Custom-Commuter.

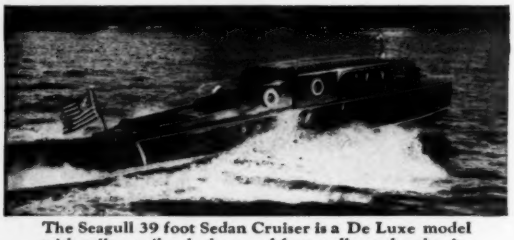
4 Distinguished

COMMUTER MODELS



The new 39 foot Robinson Seagull Sport Sedan with forward open riding cockpit and bridge deck controls. Complete cruising accommodations for four.

The 40 foot Robinson Seagull Speed Cruiser is available with both single and twin screw power. Speeds up to 35 miles per hour.



The Seagull 39 foot Sedan Cruiser is a De Luxe model with galley, toilet, lockers and four pullman berths, including spacious after cockpit. A 32 mile boat for twenty passengers.

DEVOTED TO THE ENDS OF GREATER SPEEDS AND COMPLETE CRUISING LUXURIES

The new Robinson Seagull Sedan Cruisers and Custom-Commuters provide a tangible evidence of the dependability and smart performance—beauty and real quality which experience and modern design now affords the boat owner. No other builder in America specializes to the degree which the Robinson organization has done in offering so many handsome and distinguished all-mahogany speed cruisers and commuters. A definite ideal also exists on the part of the Robinson personnel of designers and builders to create an unassailable standard of custom completeness. This genuine standard for value has been repeatedly acknowledged by owners who could afford a boat of any price. You may be sure that any one of the four Robinson Seagull models will provide you more than ordinary performance—more than the usual seaworthiness, dependability and fleet commuting speeds.

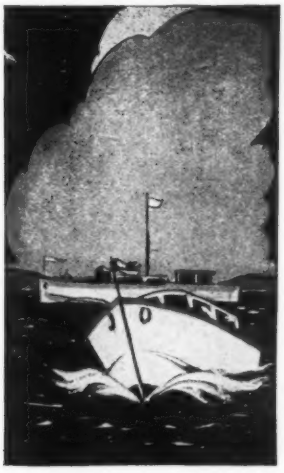
ON DISPLAY AT NEW YORK MOTOR BOAT SHOW
JANUARY 17th - 25th

ROBINSON MARINE CONSTRUCTION COMPANY
BENTON HARBOR, MICHIGAN

ROBINSON Seagull CRUISERS

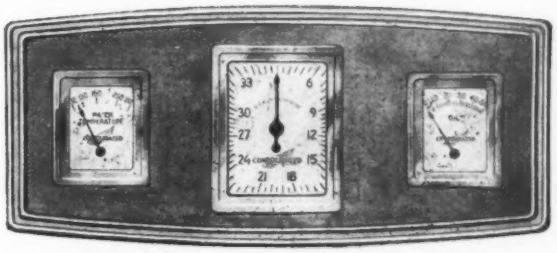
Advertising index will be found on 3rd last page

For Modern Requirements



of

boat and engine design



Standard Consolidated instrument panel of modern design

Standard marine panels of newest design, painstakingly produced to meet modern boat and engine requirements for all types of craft, are now available in various combinations of Consolidated instruments.

Because of the increasing popularity of smartly built panels in modern boats, Consolidated is pleased to extend further its facilities for the creation of expertly designed instrument boards happily combining mechanical precision with panel decorativeness.

Panel suggestions and the complete line of Consolidated marine instruments will be on display at the New York Motor Boat Show in Grand Central Palace, January 17th to 25th, inclusive. A cordial invitation to examine this exhibit in Booth No. 98 on the third floor is extended to the boating fraternity.

CONSOLIDATED INSTRUMENTS

CONSOLIDATED INSTRUMENT CO. *of* AMERICA, Inc.
305 East 47th Street, New York City

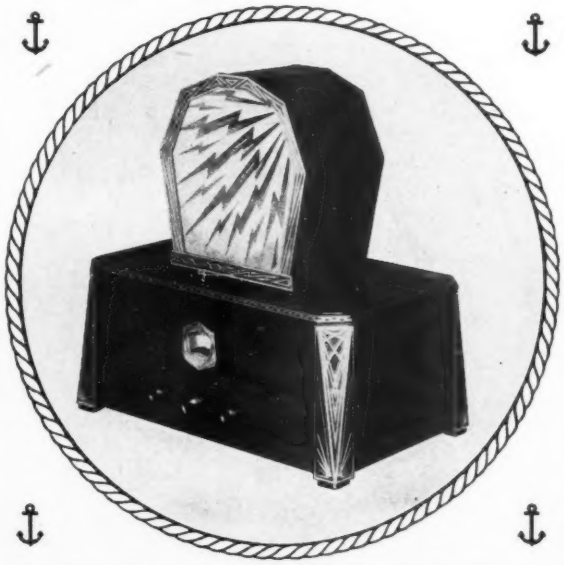
"SEA-GOING" RADIO SETS

. . . Designed for the smartest craft afloat!

Yours may be a neat little cruiser or a regular floating palace. It's all the same . . . one of these Crosley Screen Grid battery operated sets will fit in perfectly. They're specially designed to occupy a minimum of space and give a maximum of satisfactory performance. Really, you'll be amazed when first you hear one!

Equally amazing is the low battery drain—25 per cent less than on ordinary sets. And the famous Crosley Dynacone, the power speaker with which these sets operate, also uses very little current.

See these new Screen Grid battery sets at your dealer's. They're priced, you'll notice, most reasonably. Or, if you prefer, write us direct for full information.



Crosley 21. *Metal case. Utilizes six tubes, including THREE 222 Screen Grid Battery tubes. With legs, $54. Receiver: 7¾" high, 17¾" wide, 11¾" deep. Speaker: 10½" high, 9½" wide, 6½" deep* **$49** without accessories

Crosley Dynacone Speaker $18 extra

Crosley 22. *The same Screen Grid storage battery unit as in Crosley 21 is incorporated in a beautiful console cabinet of two-tone walnut veneer, complete with the Crosley Dynacone power speaker: Dimensions: 40" high, 24" wide, 14¾" deep*

$88.50 without tubes or batteries

THE CROSLEY RADIO CORPORATION
Powel Crosley, Jr., Pres.
CINCINNATI, OHIO

Home of WLW—"the Nation's Station"

A. C. and D. C. electric sets, too!

Besides the battery models shown here, The Crosley Radio Corporation produces a complete line of 110-volt A. C. and 110-volt D. C. radio receivers for use in cruisers where such current is available.

Western prices slightly higher

You're there with a

CROSLEY

Advertising index will be found on 3rd last page

board the Dawn Cruisers

at the Motor Boat Show

GRAND CENTRAL PALACE, NEW YORK
January 17 to 25 inclusive

The new Dawn 48 will make her debut.

She differs from the Dawn 45, which will also be shown, principally in the matter of size. Room available through greater length has been distributed throughout the plan. The crew's quarters are ample for two men. The engine-room space permits the option of sufficient power for better than 20 miles per hour.

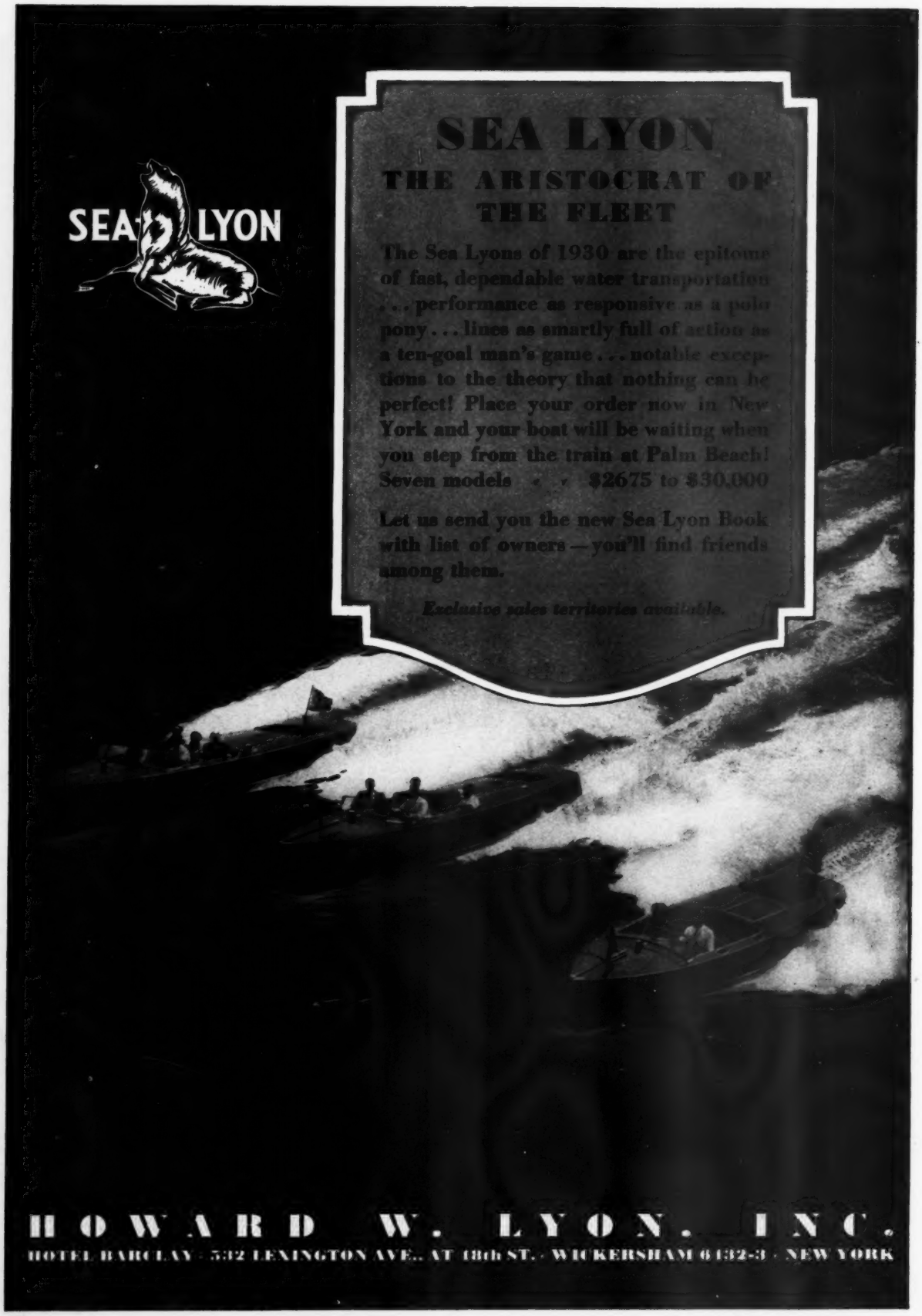
At the Motor Boat Show last year orders were placed for the entire production up to July. Boats sold after the show were for later delivery. To guard against a similar occurrence this year we have doubled our manufacturing facilities . . . but you never can tell. Place your order early and be sure of those first bright days . . . sailing days this spring.

DAWN
TWIN-SCREW CRUISERS

DAWN 45-footer
Powered by twin Lathrops, each 70 HP.-Speed 14 M.P.H.
$16,900 afloat at Clason Point

DAWN 48-footer Express
Powered by twin Sterling Petrels, each 150 HP.-Speed 22 M.P.H.
$23,800

DAWN BOAT CORPORATION
Clason Point — New York City
Established 1906 — Tel. Westchester 7000


SEA LYON
SEA LYON
THE ARISTOCRAT OF THE FLEET
The Sea Lyons of 1930 are the epitome of fast, dependable water transportation . . . performance as responsive as a polo pony . . . lines as smartly full of action as a ten-goal man's game . . . notable exceptions to the theory that nothing can be perfect! Place your order now in New York and your boat will be waiting when you step from the train at Palm Beach! Seven models . . . $2675 to $30,000
Let us send you the new Sea Lyon Book with list of owners—you'll find friends among them.
Exclusive sales territories available.
HOWARD W. LYON, INC.
HOTEL BARCLAY · 532 LEXINGTON AVE., AT 48th ST. · WICKERSHAM 6-132-3 · NEW YORK

Advertising index will be found on 3rd last page

Richard F. Hoyt, winner of the President's Cup at the Potomac Regatta last fall receiving this famous trophy from the hand of President Hoover in Washington

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TILDEN FOUNDATIONS
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JANUARY, 1930

Vol. XLV, No. 1

MOTOR BOATING

FIFTY-SEVENTH STREET
AT EIGHTH AVENUE
NEW YORK, N. Y.

Edited by

CHARLES F. CHAPMAN

CALENDAR OF COMING EVENTS

January 6—St. Petersburg, Fla. I. Chester Spinney, Tampa, Fla.

January 17-25—Motor Boat Show, Grand Central Palace, New York, N. Y.

February 21, 22—Palm Beach Yacht Club Regatta, Palm Beach, Fla., Com. W. J. von Behren, Citizens Bank Bldg., West Palm Beach, Fla.

March 25-26—Miami Beach, Fla. C. F. Chapman, 959 Eighth Ave., New York City.

March 29-30—Havana, Cuba. Rafael Posso. Habana Yacht Club, Havana, Cuba.

March 29 to April 5—Detroit Motor Boat & Sportsman Show, Detroit, Mich. H. H. Shuart, 5-219 General Motors Bldg., Detroit, Mich.

April 4-5—Jacksonville, Fla. Florida Yacht Club, Jacksonville, Fla.

July 7-19—Observation Races for the several contenders for the defense of the America's Cup.

August 20-30—Official Trial Races to select the defender of the America's Cup against the challenge of Sir Thomas Lipton.

September 6-7—Cincinnati, Ohio. E. C. McHugh, Times Star Bldg., Cincinnati, Ohio.

Beginning September 13—Races for the America's Cup. American defender and Sir Thomas Lipton's Shamrock V.

CONTENTS

AMERICA AND EUROPE - - - - - - - - - - 16
YACHT CLUBS ON CRUISING ROUTES - - - - - - - 18
AMERICAN MOTOR BOAT RECORDS - - - - - - - - 20
SPINDRIFT MAKES A TRIAL TRIP - - - - - - - - 22
THE CHANNEL ISLANDS OF SOUTH CALIFORNIA - - - - - - 23-26
ANTICOSTI—A FAST COMMUTER - - - - - - - - 27
OLIVE K, CHARLES F. KETTERING'S PLAYTHING - - - - - 28-29
CARIBBEAN BLUE, PART IV - - - - - - - - - 30-33
RADIO COMPASS FOR SMALL BOATS - - - - - - - - 34
WHERE TO KEEP ONE'S BOAT - - - - - - - - - 35-38
WHAT GOOD ENGINES CAN DO - - - - - - - - 39
SWEDEN'S PLACE IN MOTOR BOATING - - - - - - - 40-41
LITTLE ENGINES DO BIG WORK - - - - - - - - 42
RUNABOUTS FOR EVERYONE - - - - - - - - - 43
THE MIRACLE WORKER IN MARINE ENGINES - - - - - - 44-45
THE CRY FOR PRODUCTION - - - - - - - - - 46-47
ENGLISH CHANNEL RECORD BROKEN AGAIN - - - - - - 48
MISTER SIMMS, A HUSKY CRUISER - - - - - - - - 49-51
MISTER JARVIS—A MASTERLY CRUISER - - - - - - - 52
SMALL BOATS, THEIR CARE, CONSTRUCTION AND EQUIPMENT - - 53-56
PRIZE QUESTION 1—ENGINE RENEWALS, REPAIRS AND CHANGES 53-55
PRIZE QUESTION 2—WHEN THE STARTER STICKS - - - 56
YARD AND SHOP - - - - - - - - - - - - 58-64
OUTBOARD MOTOR BOATING CONTENTS - - - - - - - 169

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AMERICA AND EUROPE

By MAURICE PAUWAERT

Secretary International Motor Yachting Union

THERE are two international bodies which regulate the sport on the water. One is the International Yacht Racing Union, which controls sailing, and the other is the International Motor Yachting Union, which controls motor yachting.

The first is fixed in London, and although the United States are not affiliated, yet the New York Yacht Club have repeatedly sent delegates to attend the meetings, and on the fourth, fifth and sixth of November this year, Messrs. Clifford Mallory (N.A.Y.R.U.), Samuel Dauchy (N.A.Y.R.U.), George Cormack (Sec. N.Y.Y.C.) and W. A. W. Stewart (N.Y.Y.C.) were present in London. They will bring home the tale of how the delegates of all the European nations did much to meet the American ideas and at any rate, the recent races with 6-meter yachts and 22 meters show that unity has been achieved to a great extent.

The second body is fixed in Brussels, Belgium. It includes the following nations, duly affiliated: U. S. A. (Yachtsmen's Association of America), France, England, Germany, Italy, Sweden, Holland, Belgium, Ireland, Switzerland, Argentine, Poland, Hungary. In other words, all nations interested in motor yachting are affiliated.

That this Union has done much to help international racing is borne out by the following facts:

The International 1½ Liter class was created and adopted by all nations. Readers of MoToR BoatinG will remember how the Americans won the Duke of York trophy this year. (Miss Rioco.) The world record for the class has just been recognized by the Union. Speed 52.63 miles, by Miss Rioco III, owned by J. Talbot, driven by R. Snoddy.

An American boat, Doc's II, won the prize offered by King Albert in 1926.

American boats, Miss America V and Miss America VII, raced this year at Venice, Italy.

European boats have raced in U. S. A. I need not do more than just name Miss M. B. Carstairs' Estelle and Major Segrave's Miss England.

And this is only a beginning. Next year there will be three challengers for the B. I. T.: Miss Carstairs, Major Segrave and an Italian. And what the Americans will do, we, in Europe, do not know yet.

Gar Wood holds, of course, the world record for the unlimited class. Certificate issued by the I. M. Y. U. Another new world record, recognized by the Union, is for Miss California, owned and driven by Dick Loynes; speed 51.047 m. p. h.

I repeat, this is only a beginning. There are certain tokens which show that American motor boat enthusiasts realize that the Union's main object is to serve and this is what I want to show.

World records: What position does the Union take? Well, where national records are concerned, the Union does not interfere at all. U. S. A. are at liberty to do exactly as they like. The list of records as published by MoToR BoatinG is rightly called "American Motor Boat Records." Never mind the class, never mind the kind of record, never mind whether expressed in statute or other miles, it has nothing to do with the Union. And the same thing applies to all other countries. If, for instance, the French care to establish a record for sea going cabin cruisers, they can do so. It is a matter for the National authorities of each country to satisfy themselves that the national records claimed were made in accordance with their own rules. So let it be clearly understood that the Americans in America and the English in England do just as they like, since it is obvious that in each country there are fast and strict rules which ensure equitable results.

But where WORLD RECORDS are concerned the matter is different. I will take as an example the 1½-Liter class. There are 1½ Liters in America, England, France, Germany, Italy. Now, how can an American 1½-Liter claim to hold a world record unless the owner is quite sure that a French or English boat has not attained a higher speed? This is where the I.M.Y.U. steps in and proclaims that the American boat is actually the record holder in her class. All record claims are concentrated in the offices of the Union and it is a simple matter for the secretary to state whether or not a new claim is valid. Incidentally, let it be pointed out that the sporting interests of the owner and the commercial interests of the builder and the motor manufacturer are thus protected. For instance, Dick Loynes, owner of Miss California, can rightly claim to be the world champion in the 1½-Liter class (151 unlimited) without fear of being contradicted by any one. And I think this means quite a lot.

But here intervenes another question. Which kind of record does the I.M.Y.U. recognize? It goes without saying that absolute uniformity is to be observed by everyone and the Union has laid down very strict rules, known as the International Record Rules. These rules were agreed upon by the delegates of 12 nations including U. S. A. The competing boat has to cover six times (three times up and three times down) a distance of one nautical mile. Practically this coincides with the American mile trials, with the exception that we use the nautical mile instead of the statute mile. When this question was discussed in 1927 and 1928 the French suggested their national kilometer, the Americans the statute mile and the English the nautical mile. The kilometer is unknown in America and England. The statute mile is unknown on the Continent. Only the nautical mile is known all over the world and is truly international. Therefore, the latter was chosen. Americans have adopted it whenever they wanted to establish a world record and the Detroit Yacht Club, for one, have a course of one nautical mile apart from their customary statute mile course.

Naturally, it does not matter much which course is used as long as everybody uses the same. Now, regarding the expression of speed attained, the Union decided that speed would be expressed in nautical miles per hour, but as they fully realize the importance of making the speed clear to everyone, the results are shown as follows on the official certificate: (Example)

Miss Rioco: 45.726 nautical miles.
52.630 statute miles.
84.684 kilometers

so that there can be no misunderstanding whatever.

The fee charged by the Union for establishing world records is as follows:

For limited class boats such as 151 c. i., 1½-Liter, outboards, etc., 350 Belgian francs, which is about nine dollars.

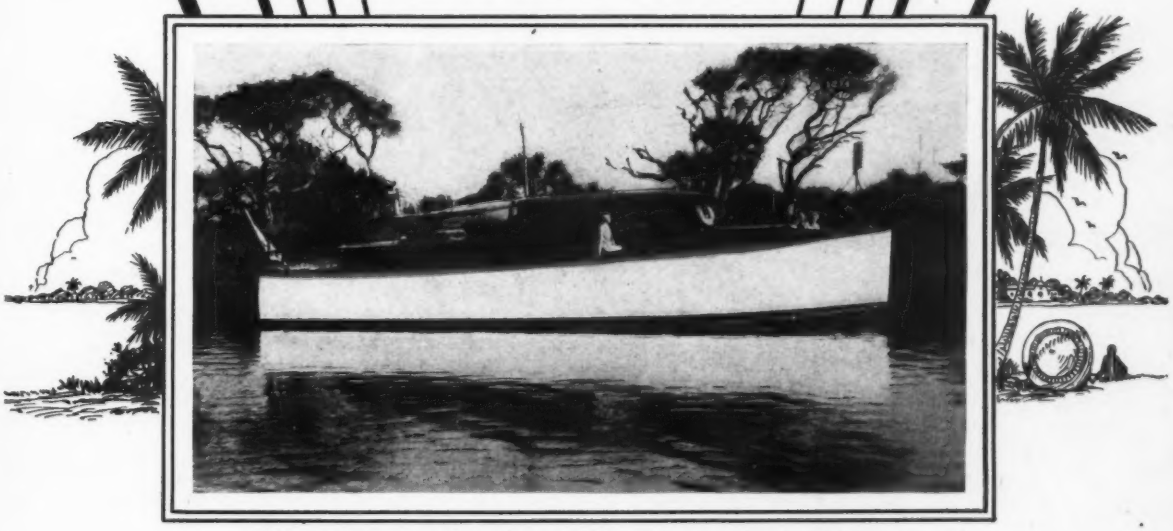
For the unlimited class, such as Miss America, 700 Belgian francs, about eighteen dollars. I don't suppose anyone will think this is excessive.

World records established in U. S. A. can be officially recognized within a fortnight of their establishment, or in other words, two or three days after they have reached Brussels. The Bureau of the Union, and of course the Yachtsmen's Association of America are always prepared to supply any information concerning existing records.

(Continued on page 70)

GREATEST VALUE

GREATEST SEAWORTHINESS
GREATEST ECONOMY
GREATEST COMFORT
GREATEST SAFETY



The Boat the Stock Market did not hurt

WE ARE NOW RUNNING OVERTIME TO KEEP UP WITH DELIVERIES . . . . WE SHALL BE GLAD TO SHOW YOU THE BOAT UNDER WAY BY APPOINTMENT OR TO PROVIDE INFORMATION

HUCKINS YACHT CORPORATION
JACKSONVILLE **FLORIDA**

The Twin Screw

Fairform **45** *Flyer*

YACHT CLUBS ON CRUISING ROUTES

Concluding Part of a Directory of Clubs in the United States on Waters That Can Be Reached by the Average Cruiser

THE November and December issues of MoToR BoatinG contained the first two instalments of a complete list of yacht clubs located on the cruising waters of the United States and we are publishing herewith the third and concluding part. The list has been prepared to show, in geographical sequence, all the yacht clubs which yachtsmen may reach on coastal and inland waters, navigable by the cruiser of ordinary draft. The first part of this directory, which appeared in the November number, contained a listing of all clubs from the Bay of Fundy to New York along the Atlantic Coast. The second instalment, published last month, covered the territory from New York to Florida, as well as the states located on the Gulf of Mexico. In this issue we continue up the Mississippi River and its tributaries and then follow the West Coast from south to north. Separate sections are then devoted to the clubs found along the Hudson River, the St. Lawrence, each of the Great Lakes, the Finger Lakes of New York and finally, Lake Champlain. The key given at the beginning of the directory enables one to find, in a few seconds, the portion of the list that covers the territory in which he contemplates a cruise. It is suggested that readers save all parts of the list as it will prove of great value in planning future cruises.

KEY TO YACHT CLUB DIRECTORY ARRANGED GEOGRAPHICALLY

K. Mississippi River and Tributaries
  1. Mississippi
  2. Ohio
  3. Illinois

L. West Coast (San Diego to Puget Sound)
  1. Southern California
  2. San Pedro Harbor
  3. San Francisco Bay
  4. Columbia (Willamette) River
  5. Puget Sound

M. Hudson River (New York to Albany)

N. St. Lawrence River
  1. South Shore
  2. North Shore

P. Great Lakes
  1. Ontario
    a. New York Shore
    b. Canadian Shore
  2. Lake Erie (Niagara River & Buffalo to Detroit River)
  3. Lake St. Clair
  4. Lake Huron
  5. Lake Michigan
  6. Lake Superior

Q. Finger Lakes Region

R. Lake Champlain

DIRECTORY OF CLUBS

K. MISSISSIPPI RIVER AND TRIBUTARIES (Mississippi, Ohio and Illinois Rivers)

1. MISSISSIPPI RIVER

Southern Yacht Club, West End, New Orleans, La.
Topeka Motor Boat Club, Topeka, Kansas
Chain Yacht Club, Chain of Rocks, St. Louis, Missouri
Kansas City Yacht Club, Kansas City, Missouri
Lotus Club, St. Joseph
St. Louis Yacht Club, St. Louis
Carondolet Motor Boat Club, St. Louis
Meramac Motorboat Club, St. Louis
Alton Motor Boat Club, Alton, Illinois
Quincy Power Boat Club, Quincy
Galena Launch & Boat Club, Galena
Dixon Boat Club, Dixon
Moline Boat Club, Moline
Rockford Boat Club, Rockford
Savanna Boat Club, Savanna
Island City Boating Ass'n, Rock Island, Illinois
Burlington Launch Club, Burlington, Iowa
Shoquoquon Boat Club, Burlington
Muscatine Power Boat Club, Muscatine
Clinton Boat Club, Clinton
Davenport Boat Club, Davenport
Guttenberg Motor Boat Ass'n, Guttenberg
Sioux City Yacht Club, Sioux City, Iowa
Keokuk Motor Boat Club, Keokuk
Ottumwa Boat Club, Ottumwa
Bellevue Boat Club, Bellevue
Des Moines Power Boat Club, Des Moines
Fort Madison Launch Club, Fort Madison
Dubuque Motor Boat Club, Dubuque
Memphis Power Boat Club, Memphis, Tennessee
St. Paul Motor Boat Club, St. Paul, Minnesota
Red Wing Yacht Club, Red Wing
Lake Pepin Yacht Club, Lake City
Minnesota Boat Club, St. Paul
Winona Motor Boat Club, Ft. of Kansas Street, Winona
Cassville Motor Boat Club, Cassville, Wisconsin
Eau Claire Launch & Boat Club, Eau Claire
Onalaska Boat Club, Onalaska
LaCrosse Motor Boat Club, LaCrosse

2. OHIO RIVER

Louisville Power Boat Club, Louisville, Kentucky
Ohio River Launch Club, Cincinnati, Ohio
Ydrad Power Boat Club, Wabash River, Lafayette, Indiana
Jeffersonville Motor Boat Club, Jeffersonville
Evansville Boating Club, Evansville
Corinthian Yacht Club, Rocky River, Ohio

3. ILLINOIS RIVER

Miami Power Boat Club, Calumet River, Riverdale, Illinois
Riverside Power Boat Club, Springfield
Havana Boat Club, Havana, Illinois
Pekin Boat Club, Pekin, Illinois
Peoria Yacht Club, Peoria, Illinois
Illinois Valley Yacht & Canoe Club, Peoria, Illinois
Joliet Yacht Club, Joliet, Illinois

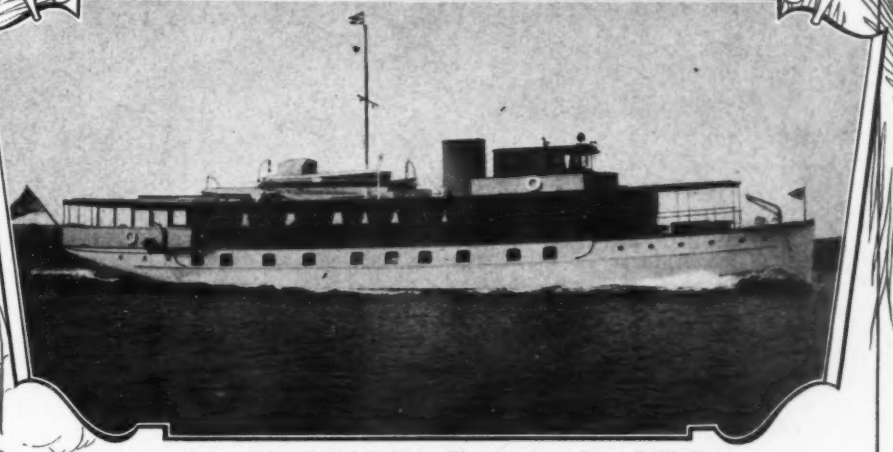
L. WEST COAST (SAN DIEGO TO PUGET SOUND)

1. SOUTHERN CALIFORNIA

San Diego Power Boat Association, San Diego Bay, California
San Diego Yacht Club, Coronado, San Diego Bay
Balboa Palisades Club, Newport Beach
Newport Harbor Yacht Club, East Newport, Newport Bay
Catalina Island Yacht Club, Catalina Island, San Pedro Channel
Santa Cruz Yacht Club, Monterey Bay, Santa Cruz
Santa Monica Yacht Club, Santa Monica Bay

(*Continued on page 66*)

WINTON ENGINES



Maemere, a new 100-foot, Mathis-built, Winton-Diesel houseboat. Owner, DeWitt Page.

Egypt's Classic Symbol

SAILING up the river Cydnus, in a barge with gilded stern, outspread sails of purple, and silver oars - so came Cleopatra, Egypt's classic symbol of enchantment, to the great Antony. Fortunate she was in selecting the most effective setting for her charms - a beautiful boat on a limpid stream. Today, our ships, tho fashioned differently, still weave their mystic witchery to challenge man's admiration. Beauty and grace they have, and a degree of utility that harmonizes with the modern mode.

Ships of distinction, Winton-powered, will, quite naturally, be more numerous in southern waters this season than ever before. Among them will be late creations of competent naval architects, including new-type Mathis-built Winton-Diesel houseboats - sleek, fast ships, seaworthy for "outside" requirements, with draft shallow enough for inland waters, and commodious, luxurious accommodations that make life aboard a continual joy. Winton Engines, America's supreme marine power plants for fine pleasure craft, are built in a wide range of sizes for houseboats, yachts, and commuters. Details upon request.

THE WINTON ENGINE COMPANY
CLEVELAND, OHIO, U. S. A.

WINTON

AMERICAN MOTOR BOAT RECORDS

MILE TRIALS

(Average of 6 One Mile Runs)

Miss America VII, owned by Gar Wood, at Miami Beach, Florida, March 23, 1929. Built by Gar Wood, Packard motors. Speed 93.123 m.p.h.

GOLD CUP CLASS

625 cubic inch boats

Fastest heat (30 miles) Hotsy Totsy, owned by Caleb Bragg, Greenwich, Conn., 1927. Time, 35:06:83; speed 51.261.

Fastest lap (3 miles), Imp, owned by Richard F. Hoyt, Manhasset Bay, 1926. Time, 3:22; speed, 53.58.

Total race (90 miles), Imp, owned by Richard F. Hoyt, Red Bank, N. J., 1929. Time 1:51:33.48, speed, 48.405.

UNLIMITED HYDROPLANE

Fastest heat (30 miles), Miss America, owned by Gar Wood, Detroit, 1920. Time, 25:44; speed, 70.0.

Fastest lap (5 miles), Miss America, owned by Gar Wood, Detroit, 1920. Speed 71.4.

Total race (90 miles), Miss America, owned by Gar Wood, Detroit, 1920. Time, 1:28:07; speed, 62.0.

DETROIT SWEEPSTAKES

Fastest lap (3 miles), Packard Chris Craft II, owned by Colonel J. G. Vincent, Detroit, 1925. Speed, 58.95.

Total race (150 miles), Packard Chris Craft II, owned by Colonel J. G. Vincent, Detroit, 1925. Time, 2:41:47.10; speed, 55.65.

BRITISH INTERNATIONAL TROPHY
UNLIMITED HYDROPLANES

Fastest heat (30 nautical miles), Miss America VIII, owned by Gar Wood. Detroit, Sept. 2, 1929. Speed, 75.287 m.p.h.

Fastest lap (5 nautical miles), Miss America VIII, owned by Gar Wood, Detroit, Sept. 2, 1929. Speed 79.362 m.p.h.

12 HOURS

Rainbow VII, owned by Harry B. Greening, Lake Rosseau, Canada. Sept. 30, 1929. Total 723.92 miles. Running time 11:27:28. Average speed 63.17 m.p.h.

24 HOURS

Rainbow IV, owned by Harry B. Greening, Lake Rosseau, Canada, October 2-3, 1925. Total miles, 1218.88. Speed 50.78.

1½ LITER CLASS (TRIAL RUNS)

Boat driven by Ralph Snoddy at Newport Beach, Calif. Oct. 6-7, 1929. Built by Hacker. Miller engine. Speed 45.726 nautical m.p.h.; 52.585 statute m.p.h.

In Competition, Little Spitfire, owned by J. H. Rand, Jr., Detroit, September 3, 1927. Speed 42.17.

151 CLASS—UNLIMITED

1-mile straightaway, Spitfire V, owned by J. H. Rand, Jr., Albany, N. Y. July 5, 1927. Speed 62.82.

In competition, Spitfire V, owned by J. H. Rand, Jr., San Diego, Calif. December 12, 1927. Speed 55.42.

One lap in competition, Miss California, owned by Loynes-Harris, San Diego, Calif. December 12, 1927. Speed 59.68.

151 CLASS LIMITED

In competition, Miss California, owned by Dick Loynes, at Sarasota, Florida. March 8, 1929. Speed 49.20 m.p.h.

Miss California, owned by Dick Loynes at Balboa, Calif., Dec. 4, 1929. Built by Dick Loynes. Miller engine. Speed 54.729. m.p.h.

340 CLASS

Miss California, owned by Loynes-Harris, Houston, Texas. July 2, 1927. Speed 50.99.

510 CLASS

Miss Houston IV, owned by Frank H. Robertson, Louisville, Ky. July 5, 1926. 10 miles—in competition. Speed 51.28.

7⅛ miles, Miss Kemah, owned by Henry Falk, Houston, Texas. July 4, 1927. Speed 53.41.

One Milé Trials—Miss Houston IV, owned by Frank H. Robertson, Louisville, Ky. July 5, 1926. Speed 53.43.

725 CLASS

5 Miles—Helen, owned by M. J. A. Mitchell, Louisville, Ky. July 5, 1926. Speed 61.22.

Mile straightaway, Doc's II, owned by I. R. Van Sant, Peoria, Illinois. October 11, 1925, winning King of Belgians' Trophy. Speed 61.77.

SINGLE ENGINE HYDROPLANES

1 mile, Miss Chicago, owned by Sheldon Clark, Detroit. Sept. 3, 1921. Speed 72.86.

15 miles in competition, Fore, owned by W. D. Foreman, Cincinnati, Ohio. September 29, 1923. Speed 64.75.

OUTBOARD RECORDS

The official Outboard Racing Rules adopted by all Associations for 1929 recognize American records made only over distances of five, six, ten and fifteen miles and mile trials made over statute and nautical miles in each of the several classifications of engines, by drivers of Divisions I and II.

It must be emphasized that records under these rules are AMERICAN records and NOT World records.

MILE TRIALS, STATUTE MILES
CLASS A, DIVISION I

Blue Streak, driven by Margaret Mullin at Balboa, Calif., Dec. 4, 1929. Built by Elsinore. Lockwood engine. Speed 27.85 m.p.h.

CLASS A, DIVISION II

Blue Streak, driven by Church Hall, at Balboa, Calif., Dec. 4, 1929. Built by Elsinore. Lockwood Engine. Speed 28.4 m.p.h.

CLASS B, DIVISION I

Baby Brontosaurus, driven by Billy Lyon at Balboa, Calif., Dec. 4, 1929. Built by Crandall. Johnson engine. Speed 43.974 m.p.h.

CLASS B, DIVISION II

Crandall Comet, driven by Chas. Holt, at Balboa, Calif., Dec. 4, 1929. Built by Crandall. Johnson engine. Speed 43.94 m.p.h.

CLASS C, DIVISION I

Black Maria V, driven by Mildred Milde, at Newport Beach, Calif., Oct. 6-7, 1929. Built by Al Thomson. Evinrude C engine. Speed 43.711 m.p.h.

CLASS C, DIVISION II

Black Maria V, driven by Al Thomson, at Newport Beach, Calif., Oct. 6-7, 1929. Built by Al Thomson. Evinrude C engine. Speed 43.192 m.p.h.

CLASS D, DIVISION I

Crandall Comet, driven by Billy Lyon, at Balboa, Calif., Dec. 4, 1929. Built by Crandall. Johnson engine. Speed 47.15 m.p.h.

CLASS D, DIVISION II

Blue Streak, driven by H. G. Ferguson, at Balboa, Calif., Dec. 4, 1929. Built by Elsinore. Johnson engine. Speed 49.34 m.p.h.

CLASS E, DIVISION I

Fresno Flyer, driven by Dick Lyones at Balboa, Calif., Dec. 4, 1929. Built by Ashbridge. Johnson engine. Speed 33.78 m.p.h.

CLASS E, DIVISION II

Wildcat, driven by F. E. Ludolph, at Peoria, Ill., Oct. 15, 1929. Built by Hooton. Elto Engine. Speed 39.353 m.p.h.

(*Continued on page* 140)

. . a speed boat on the water a sport plane in the air . .

A new sport awaits you! The joy of speedboating—and the thrill of flying—combined! ¶ The Eastman Flying Yacht—a trim, snug craft for coursing the waters or sailing the skies—offers yachtsmen a pleasurable, new diversion—and at a price well within the means of all sportsmen. ¶ With accommodations for three or four, according to fuel loading, the Eastman is a light, fast ship, easily maneuverable and easy to take off and land—so simple to handle that flying it can be mastered in a few hours of instruction. Fully loaded, it leaves the water in 8 or 12 seconds and climbs 900 to 1000 feet per minute. Landing is simplicity itself—as only one point of contact is necessary. ¶ Write for complete information about the smart, trig Eastman, with its speed of 110 miles per hour, cruising radius of more than 300 miles—and attractive price of $9595. Dealers interested in adding the Eastman to speed boat lines are invited to write for full particulars.

THE EASTMAN FLYING YACHT

DETROIT AIRCRAFT
UNION TRUST BUILDING, DETROIT

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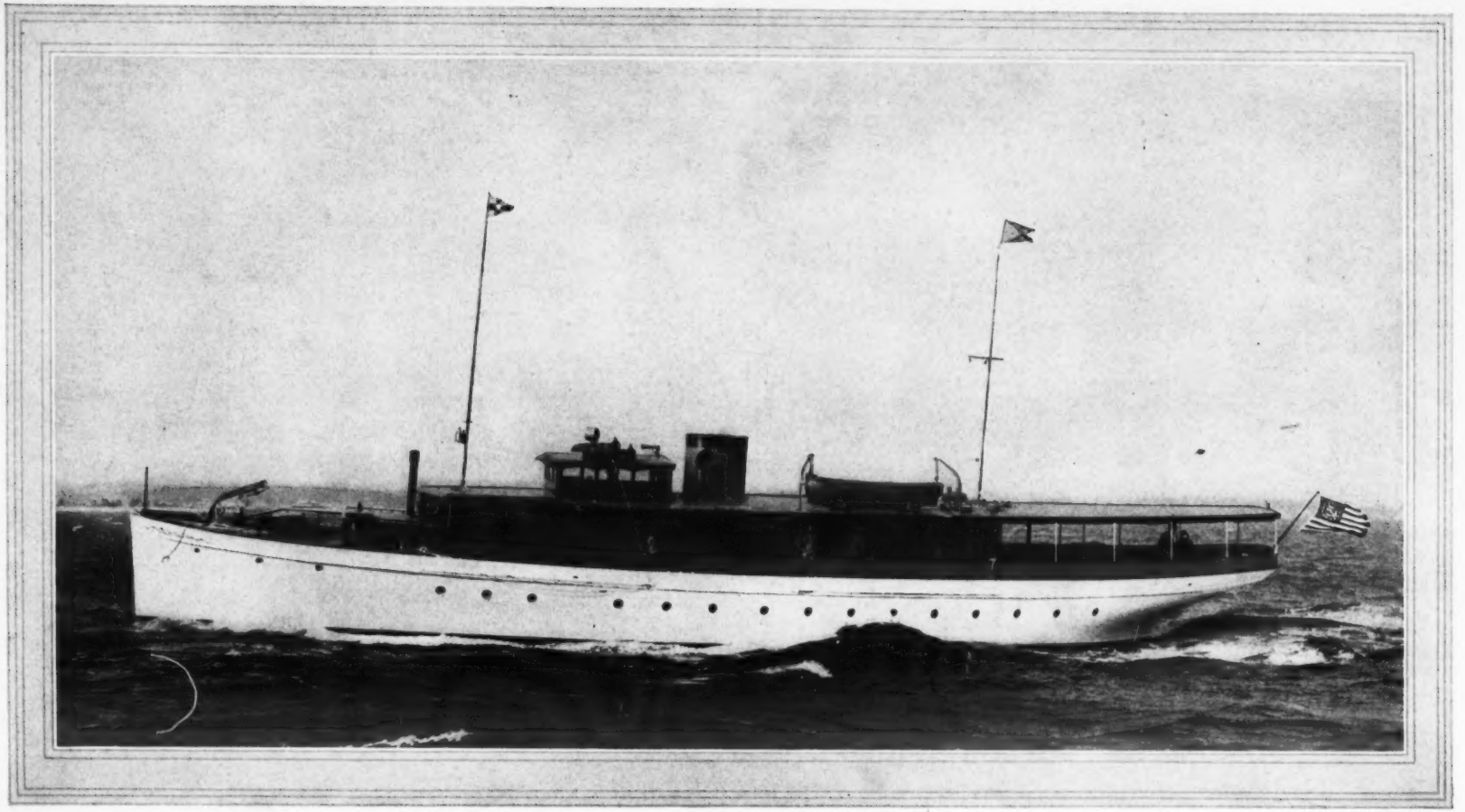
PARKS AIRCRAFT CORPORATION
EASTMAN AIRCRAFT CORPORATION
BLACKBURN AIRCRAFT CORPORATION
AIRCRAFT DEVELOPMENT CORPORATION
MARINE AIRCRAFT CORPORATION
GROSSE ILE AIRPORT, INCORPORATED
GLIDERS, INCORPORATED



M. Rosenfeld

SPINDRIFT MAKES A TRIAL TRIP

A fine new 102-foot diesel yacht designed and built for Donald Parson, Pinehurst, N. C., by Luders, is taken for a trial run on a breezy day. Her two 150 h.p. Winton diesel engines drive her at 11 knots despite the choppy sea and wind which tried its best to slow her down

JANUARY MOTOR BOATING 1930

Santa Cruz has a bold and forbidding shore of rocks

THE CHANNEL ISLANDS OF SOUTHERN CALIFORNIA

A Yachtsman's Utopia of Which Little Has Been Written

By CLEON C. MASON

AN Island is a thing apart. It is one definite remembrance in an otherwise hazy dream; it is a flash of most brilliant sunshine in a day sodden with heavy clouds and cold rain; it is a lull in a long storm. And the unseemly avidity with which staid members of our smug but dying social order seize and read every word which comes back from those hardy few who have paid for their freedom in the coin of isolation reflects how weary the race is becoming of the hopeless treadmill called civilization. Mankind instinctively loves islands because islands are symbols —each island is a tiny kingdom—each dreamer sees himself as the crowned king of his own particular Utopia far, far from the turmoil of the milling herd. An island is a tangible revolt.

Off the coast of Southern California extending from Point Conception on the north to San Diego on the south there is a group of islands too little known by people who live near them, and scarcely known at all by those outside of the state. True, some of them are valueless, mere masses of rotting rock gradually disintegrating into sand which the ceaseless wind whips into a million fantastic shapes and finally tosses into the sea. Such islands are San Nicolas and San Miguel. Others like cold but lovable Santa Barbara and Anacapa are bleak rocks reared high by some ancient upheaval and today proudly carry their ancient virginity. But some of these islands defy description. A riotous massing of bold cliffs, charming oak-lined valleys and long smooth fields of wild barley, around which the blue Pacific forms a background of endless placidity; such are Santa Cruz and San Clemente.

As a cruising ground these islands are without equal

San Clemente grew over the bow, exactly where we had expected

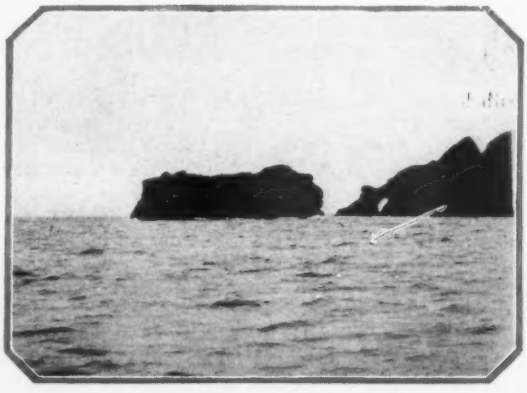
in America. The climate is sub-tropical; warm days, cool nights, and settled weather from April to November and all the while the westerly trade winds make life joyful for the sailorman. These winds are certain as the sun itself, changing but slightly unless deflected by land, yet subtle enough to keep the yachtsman alert. True, one may laze along Catalina, San Clemente or Santa Cruz week on end with only the softest of zephyrs filling the sails; or if more hardy he may attempt the nasty chop and squally winds of the outer passages; if really a tough old Barnacle Bill he will get joy wrestling with the dirty waters and winds around San Nicolas. So much for that.

We were four—four and a boy who didn't know any better. B. F., a retired banker; Herb, an escrow officer in a highly profitable (hence respectable) building and loan company; Moby Dick (he is a Nantucket Coffin—truly—whose blood is literally sea water and sperm oil), an officer in a well known bond company, and myself, a mere doctor. What more fitting than that we and the boy, who was still all enthusiasm, should go searching the islands? The cabin of Gwemmy echoed to our heated discussion—we were at sea and could say just what we pleased without shocking preachers, politicians, Rotarians or old ladies' sewing societies. Mardi and Yillah were beyond the horizon; the philosophy of Babbalanja, the sweet songs of Yoomy, the breath-taking stories of Mohi, charmed us into a state of half dreamy contentment which is the drink of rebels. Men are fools! The jingle cap and picture petticoat get them all! That great lockstep called civilization—I am afraid such heady liquor changed us—all but the boy who hadn't been roped and taught his paces yet—rebels exploring islands. A dangerous occupation—smoking in a powder vault.

Gwemmy was provisioned for three weeks. Stowing supplies on a little ship is a joy! Each nook and cranny has a use. Here absolute protection for matches, yonder dryiness and convenience for tobacco, books on the firm shelf; every inch is useful. Every owner loves his ship but because we watched Gwemmy grow into the rugged wholesome boat she is, not only watched but had toiled joyful hours with her, I think she is a little nearer to us. One ever speaks of little ships in endearing terms. The stately square-rigger, laden with the commerce of the world, running down the Roaring Forties, rounding the redoubtable Horn, lazing through the doldrums—she is a thing of magnificent beauty, one writes of her in heroics. But a little ship is a sweet song, a lilting madrigal from the lute of some exquisite child, a lyric to be sung in delicate meter.

We planned to run from Point Fermin to Smugglers Cove on Santa Cruz. Once outside the breakwater we found the obliging westerly had done the unusual, veered to the north, dead ahead, so we simply laid over on the other tack and fooled the wind by running across to Dimick's Cove on the western end of Catalina. I heard the muffled lock-step once—B. F. switched on the radio to get the 4 p. m. news reports. I suppose we should have ploughed into that head wind and made Santa Cruz despite hell and high water; but we were out for a cruise—if it were more convenient to go south, south it would be. It is altogether the happiest way of avoiding head winds.

Freddie, the boy, found that the lowest place on a boat is not necessarily the bottom of the keel when we introduced him to the mop, a bucket of hot water,



Diablo Point at Santa Cruz

and the supper dishes. Pleas of seasickness and sleepiness were in vain, we were a bunch of hard hearted (and lazy) old tars. B. F. (mind you, a retired banker) took pity on the kid in the end, which was exactly as we had anticipated. Never do anything the first day out unless you expect to keep it up!

Catalina Island has been too extensively advertised to need any word here. The Isthmus divides it into two section; to the southeast Avalon, where the social wigwams float at moorings so that the women may dance in the big pavilions; to the northwest a rugged coast with numerous small coves. Dimick's, Johnson's, and Cherry Valley, the congregating places of the maritime roughnecks.

For yachts in the vicinity of Los Angeles Harbor it is the natural objective, being a twenty-mile sail over a channel which is usually quite smooth but which can be as rough as the English Channel when wind and tide are right. Because Catalina is owned privately and is operated as a commercial exploitation of tourists, signs are posted everywhere forbidding one to land. We simple sailors are thankful that prohibition extends only to mean high tide.

The next morning the visibility was very poor, and with low visibility there is usually absence of wind. We laid our course for Santa Cruz, traveling through an oily sea until noon, when we encountered another head wind. We shifted our course to suit the occasion, shut off the motor and idled our way to Santa Barbara Island which loomed over the bow as a hazy saddle-back about 4 p. m.

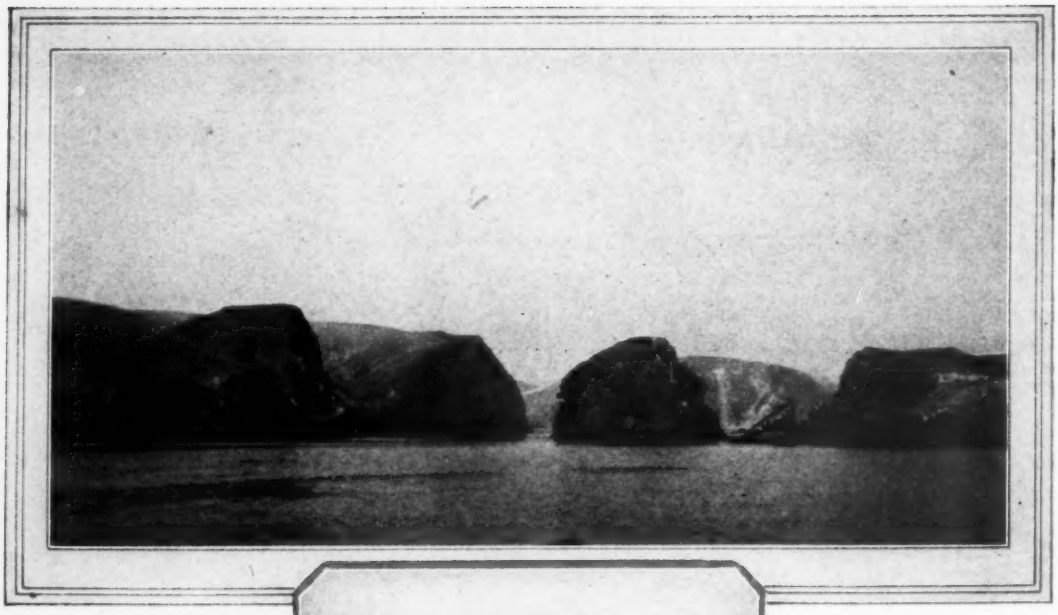
Cochas Prutos Cove on Santa Cruz is almost a perfect anchorage

This island has long been my favorite of all in the channel. It is a bleak little land, about two miles long and half as wide, inhabited by a few sheep, innumerable sea gulls, and large fields of friendly red ice plant. Safe in the shelter of a little bight at the northeast corner (anchor so that you can look squarely through the hole in the rock and directly up the first ravine) one soon senses that this is an Island. In fancy I have built many a story around the place. My friends, the Italian fishermen, have become my characters in these dramas, while the island sheds it aura of mystery and intrigue over each changing scene. Running fights, smuggled liquor, pirates, fugitives, all have been here as have been also long quiet days and splendid starlit nights when one projects his puny mind far beyond the limits of physical knowledge. Up and down the rock shores countless ages of rushing waters have washed out deep submarine caverns. All through the night they rumble and roar like spirits in distress. One grows to love Santa Barbara Island.

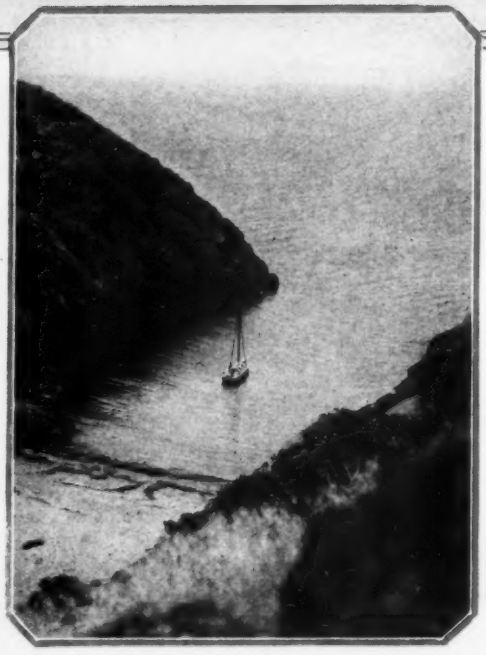
Corral Harbor is the only boat landing on San Nicolas. It is difficult to enter

The wind swept down the ravine and whistled a merry tune in the rigging, a wind cold enough to chase us below to our reading and writing. Late in the evening a solitary Italian came near us and anchored.

Santa Barbara is a hub in the group of islands. To the east Catalina, southeast is San Clemente, southwest San Nicholas, and to the west and north Santa Cruz, Santa Rosa and San Miguel. We decided to make the run to San Nicolas first and fortunately met up with a merry little breeze from the west which grew fresher with every mile we traveled. It was 9 a. m. when we headed southwest, by 11 San Nicolas was sighted, about noon the fun began. Around the island the water is relatively shallow, that is, the depths vary from 40 to 100 fathoms; with the change in depth there is a marked change in color and an even more marked change in the character of the waves. The island seems



The coast of Santa Cruz offers a limitless variety of scenery



Crystal clear waters abound in snug, land locked coves. One of a group of secure anchorages

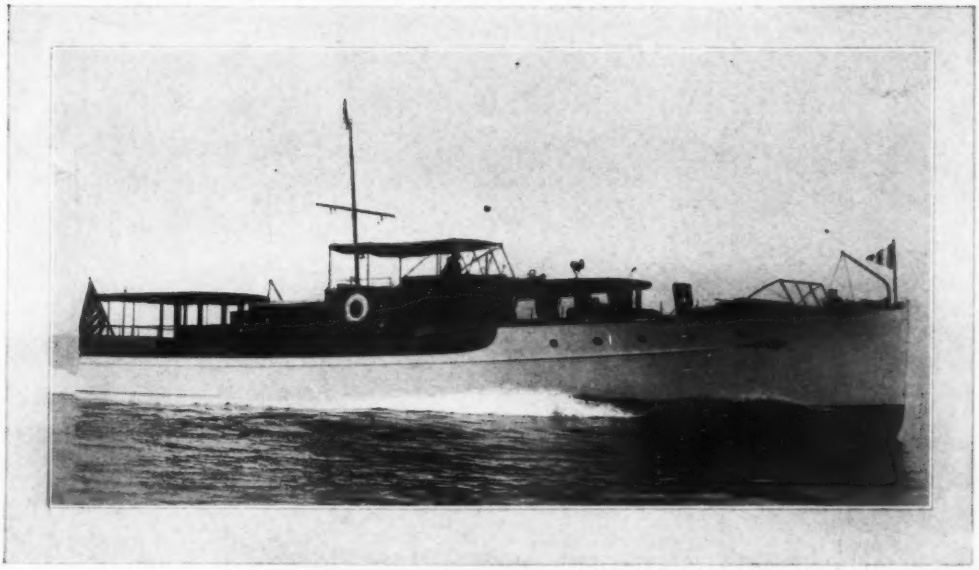
to have a big wind machine all its own. The nearer we came the more it blew and the harder it blew the steeper and choppier were the seas. We had the wind just forward of the beam so the motion was not excessive but it took all we could get to drive that bluff-bowed Gwemmy into such a popple. However, she did her work well. About 1:00 p. m. we were beyond the sand spit in relatively smooth water with a ripping breeze. For two hours we tried out the boat. It was the first time we had ever had such a good opportunity. She performed beautifully on every angle of sailing except she would hang in stays—oh, she always came about but in such a lazy fashion that one was tempted to swear a bit!

Tiring of this practice we furled sail and ran into the lee of the island under motor. From the distance San Nicholas looks smooth compared with Catalina and Santa Cruz. The sky line is long and even instead of jagged. As we drew closer miles of sweeping sand dunes became visible, for all the world a bit of desert transplanted out here in a world of restless water. On the north and east slopes there are a few straggly bushes and enough vegetation to support about fifteen hundred sheep. Slowly but surely the island is being blown into the sea.

Once it supported a goodly population of Indians, evidenced by the great number of stone-age relics found, arrow and spear heads, war clubs, beads, fish hooks and fish barbs, large stone jars and the like. The coming of the white man and his religion spelled the end for these natives. They either died or were killed. About 1850 an expedition was sent out by the mission of Santa Barbara to collect the few remaining Indians and bring them to the mainland that they might enjoy the benefits of civilization. One woman refused to leave her native land. A sudden wind came up and the schooner was forced to go without her. She lived alone for three years. At last she was found and literally forced to leave. She died two years later.

We had planned on going around the island but the wind stirred up such a nasty sea that we were glad to run far into the kelp ahead of two fishing boats and a revenue cutter. This latter boat was there on an errand of mercy—a scientist had lost his craft in a blow and had been stranded two weeks. Word was carried to the Coast Guard service, the cutter was dispatched and we were glad to have helped the shipwrecked man through that pounding surf to safety and a good meal. The anchor was let go in five fathoms of water and kelp—dinner was started, when of a sudden the cutter loomed alongside. Finally it dawned on us—we were drifting. Once more we pushed farther into the kelp and this time we held. All afternoon we rolled viciously, the wind blew from the west, a heavy swell came in from the south, and between the two things became quite lively at times.

(*Continued on page 72*)



M. Rosenfeld

Anticosti is 75 feet long with a hull of double planked cedar and mahogany

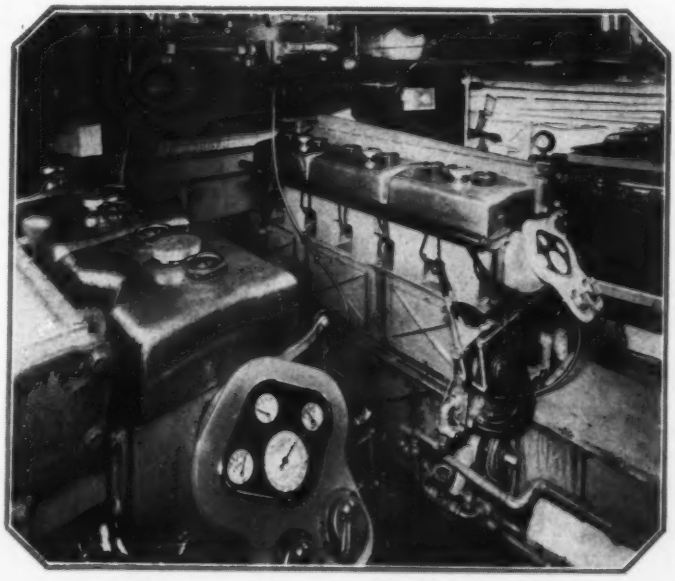
ANTICOSTI—A FAST COMMUTER

Attractive New Speed Cruiser Used by E. H. Eshbaugh for Daily Business Service on Long Island Sound

ANTICOSTI, a fast cruising boat of the popular express commuter type was built by F. D. Lawlay, Inc., from designs by Eldredge-McInnis, Inc., for Ray Skofield of New York. Shortly before the boat was ready Mr. Skofield's business made it necessary for him to transfer his interests to the Pacific Coast and E. H. Eshbaugh of New York became the owner of the boat. Mr. Eshbaugh has a summer home at Norwalk, Conn., and used this boat for commuting to the city throughout the summer. With the closing of the summer home, the boat has gone to Miami and will be in active service throughout the winter months in the south.

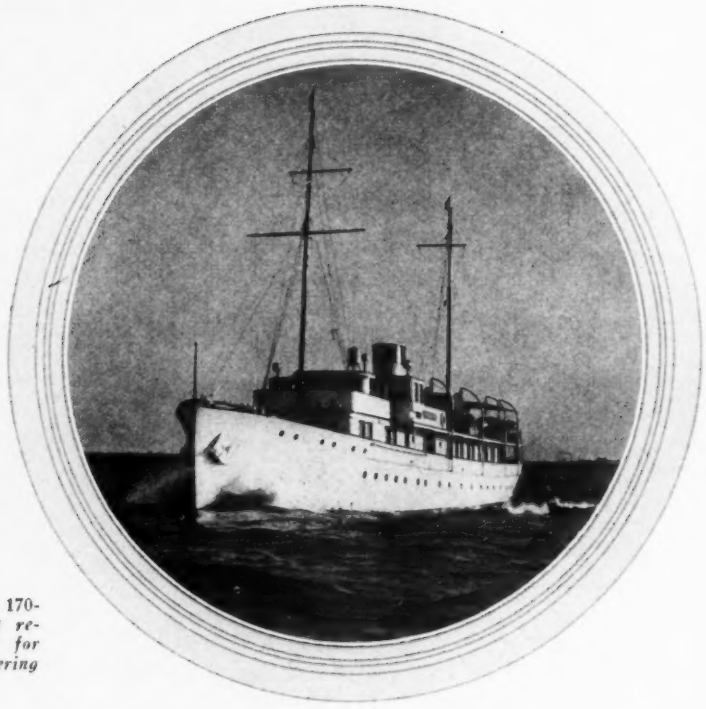
Anticosti has an overall length of 75 feet with a beam of 13½ feet. The hull itself is double planked, the inner layer being of cedar and the outer layer of Mexican mahogany. All outside joiner work is also of this fine wood, and the decks are laid in Michigan pine.

There are two double staterooms below decks, the forward one of which is used by the owner. A separate owner's bathroom has been placed close by on the port side with a separate guests lavatory on the starboard side. The berths in the cabins are built up in in the form of a bed with turned mahogany posts, headboard and footboard. Mahogany has been used to finish the deck house while butternut has been used in the galley and forecastle.



Two 350 h.p. six cylinder Winton gasoline engines drive her at 26 miles

For a power plant two 350 h.p. Winton gasoline engines have been used. A separate 2½ k.w. Universal generator operating through a set of Edison storage batteries provides ample power for all purposes. A Frigidaire refrigerating unit and an Alfite extinguishing system of the automatic type.



Olive K, the new 170-foot diesel yacht recently completed for Charles F. Kettering

OLIVE K, C. F. KETTERING'S PLAYTHING

A New Diesel Yacht With Most Remarkable Mechanical Features Ever Built Into a Ship

By AMBROSE J. MAXWELL

PERHAPS never in the history of yachting has there been such an unusual craft as Olive K, the experiment and plaything built in Bay City, Michigan, for Charles F. Kettering, president of General Motors Research Corporation. In the opinion of its builders, the Defoe Boat & Motor Works, this yacht is expected to push the industry ahead ten years. This statement is made in view of the remarkable mechanical characteristics of the boat which Mr. Kettering has studied and planned for a long time.

The mechanical marvels of Olive K are solely the ideas of Mr. Kettering. Among these—and by far the most important—is the system of synchronization which he has had installed in his new yacht. This is the only system of its kind to date. It is only natural to think that the General Motors Research head would come through with something mechanically unusual, that would startle all yachtdom, for he is the man who developed the self-starter for automobiles; who produced a lacquer finish for motor cars; who made possible the electrical lighting of farm homes and buildings; who introduced a now well known kind of gasoline to the motoring world.

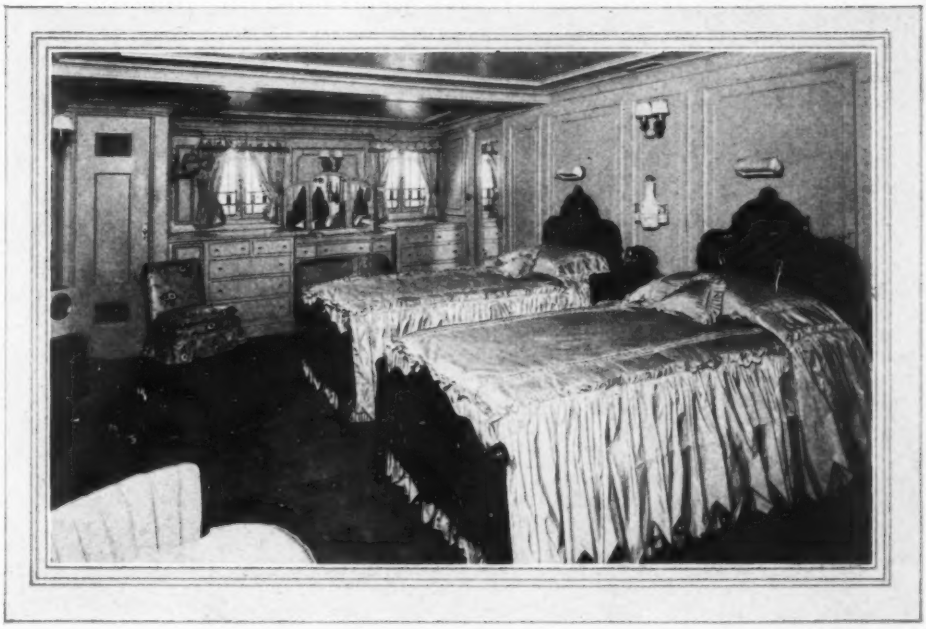
In the beginning Mr. Kettering wanted a yacht that was different. He figured and planned; he resolved that it was not necessary to tolerate undue vibration in a yacht. As a result he devised a plan whereby an alternating, directly driven, 10 kilowatt generator could be placed on the fly-wheel of each of the 550-horsepower Winton-diesel engines. He saw that the generators could be so hooked up that if one of the engines had a tendency to lag power would go across to the lazy unit, motorizing it, and thereby bring the strokes of the two engines into unison. In this way he found that the two engines function as one twelve-cylinder power plant.

Many of Mr. Kettering's friends—and many of these are engineers of some repute—were frank in saying that his synchronization plan was not practical. There were others of course, who, after taking in account the man's many and spectacular developments in the automotive industry, thought as Mr. Kettering did. And so it follows that these latter gentlemen are laughing best—and along with Mr. Kettering.

Mr. Kettering is very modest about the whole thing and never is to be found blowing his own horn about this accomplishment which is the wonderment of all those who have seen it in operation.

"Olive K," I have said, was to be different. It is.

If one is not particularly interested in great improvements in the engine room he should see the unusual radio and phonograph hook-up which the genius of General Motors has worked out. The radio and phonograph are combined in one cabinet. Through a hook-up with the telephone system either radio or phonograph may be heard in most every room in the boat. Loud speakers which serve both phonograph



Michigan Photo Co.

An attractive view of the owner's stateroom which is spacious and attractively decorated

and radio and which are concealed in the walls of the room may be toned to suit the fancy of the listener.

Supposing one was retiring in his stateroom and wanted to hear the phonograph play a selection, "The Pagan Love Song." Now the radio and phonograph are in the library. On the dial telephone in the stateroom is the program for both radio and phonograph. Each selection on either of those programs is numbered. The phonograph and the radio also are individually numbered. We will say that to start the phonograph the dialing of No. 11 (1-1) is necessary. No. 11 is dialed. The program says, for instance, that the selection mentioned is No. 30. No. 30 (3-0) is dialed. "The Pagan Love Song" starts. In the next room another guest may decide that he wants to play something and, since his loud speaker is shut off and he is not hearing "The Pagan Love Song" he picks up the receiver and hears a buzzing sound. In the office such a sound means that the line is busy. On Mr. Kettering's yacht the buzzing sound means that the phonograph (or radio) is now playing and if the guest so desires he also may tune in on it.

The radio arrangement operates similarly, providing, of course, that the station desired to be reached is within possible receiving radius of Olive K's wireless outfit.

(*Continued on page 92*)

The dining saloon in the deck house is supplied with massive furnishings

An old Spanish fort at San Felipe, Guatemala

CARIBBEAN BLUE

Water Trails to River Caves Lead to Further Clues of Ancient Mayan Routes and Yield Interesting Specimens of Primitive Art

By GREGORY MASON

Part IV.

WHEN our two and a half horse power Johnson outboard began shoving the fourteen foot length of the flat bottomed Stella up the Sarstoon again, I was well content to let my Carib aid handle the steering lever while I stretched out on top of our dunnage amidships and gave myself up to very pleasant reflections. The discovery of the ruins of Ollitas, once a great seaport city of the Mayas, which we were leaving behind, had already made this piece of river exploration in Stella a signal success. Now we were heading up-stream to explore the upper reaches of the river in the hope of finding further vestiges of the ancient trade route which I was sure had enabled the Mayas to cut off the seven-hundred mile voyage around the peninsula of Yucatan in traffic between Mexico and South America by carrying goods overland from the head waters of the Sarstoon to the Pasion River which flows into the Usamacinta, which debouches into the Gulf of Mexico.

It was afternoon and there was only a thin strip of shade under the trees which hugged the water on the left or south bank of the river. Even in late afternoon Guatemala is hot in the month of May. But we clung to Guatemala, nevertheless, and as we looked at British Honduras across the river it almost seemed that the limbs of the trees writhed in the heat.

Around a bend came an Indian canoe, manned by seven natives. In the craft were four pigs, later to be sold to white men on the coast. Two of the men were naked above the waist and clad only in cotton drawers below. The other paddlers wore cotton shirts and cotton trousers. They drifted with the current, gazing in open-mouthed curiosity. They had never seen an outboard motor. We slowed the Johnson down, then cut her off entirely and drifted alongside.

These Indians came from a village called Guarry Creek, so named from a little tributary of the Sarstoon, a short distance above us. Several of them apparently could speak nothing but Kekchi (the Kekchi Indians are a division of the Maya stock). One young man, however, knew a little Spanish and he told us that from his village there had formerly been an overland trail to Coban, a trading center of Eastern Guatemala. Some of the modern natives are still aware how this trail used to run, but it is very seldom used nowadays, the Indians preferring the much longer water route down the Sarstoon, up the coast to the Rio Dulce and thence up through the Golfete and Lake Izabal.

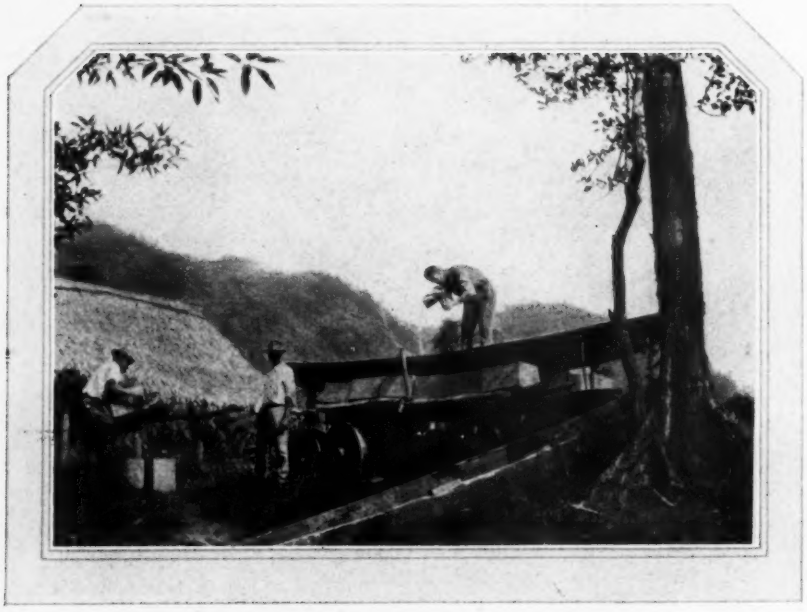
As we always do with natives, we asked these Indians if they knew of any ruins of *Los Antiguos* (the Ancients). The man who spoke Spanish mentioned having seen some "cylinders," four to twelve inches long and about two inches in diameter, made of blood-red clay with white mica on the outside. He averred

A placid view on the Rio Dulce, Guatemala

Indian children watching the first camera they had ever seen in British Honduras

he had seen the fragments of several of them scattered on the ground. Perhaps these had been some sort of elongated pottery vessels from which the bottoms had been knocked out. While this conversation was going on between the young Spanish-looking Indian and myself, an old man who held the steering paddle of the canoe was showing signs of excitement. It seems that the old steersman knew of a cave containing an upright white stone column on which had been carved characters of a type the aborigine had never seen before. This tallied so closely to a description of the conventional Maya *stela,* or inscribed monument—the sort of treasure that the archæologist would rather find than almost anything else—that I became more than a little interested. The cave was on a small stream flowing into one of the upper branches of the Sarstoon. I do not wish to locate it more accurately than that, for my search for it later proved unfruitful, and I am not going to help any

Mr. Holliday's son in the foreground with the mahogany boat which gave us a tow



Loading canoe on a mahogany tractor for overland carry

other explorer to better luck, planning as I do to go back and look for it again. This is rather ungracious of me, no doubt, for in 1926 Dr. Spinden, of Harvard, and I were able to find the ruined city of Muyil, on a lake near the east coast of Yucatan, partly owing to a tip given by Dr. Thomas Gann, the British explorer, in one of his books. Nevertheless I shall be selfish, and, if all goes well, at the time this article appears in MoToR BoatinG I shall have hunted again for the cave with the inscribed monument. Who knows what that inscription may record! Many of the Mayas monuments bear carved dates, some of which archæologists have been able to read, but no scientist has yet been able to read the inscriptions accompanying the dates. We are in the predicament which an explorer from Mars would be in if he came to this earth after the destruction of our civilization and, finding a history of the American Revolution, was able to read only such dates as 1776 and 1789. When you remember that the Mayas, who were the most civilized of all ancient Mayas, pretty surely knew a good deal about the other American civilizations to the north and south of them, your imagination is staggered to think what we might learn of the mysterious past of America if we could but read the ancient hierogliphs carved in stone by the artists who served the priestly kings of Central America at a time when the British Isles were a wilderness inhabited by savages.

We cast off from the canoe with many tangible thanks in the shape of cigarettes and small bottles of Woolworth perfume for the information we had received, and opening the throttle of the Johnson chug-chugged up stream bravely. The scenery was a long time changing. For the most part the river was still fairly wide and sluggish, the banks still low and damp, the only trees being mangroves. It was about five o'clock before the banks began to look a little more solid. Then, sweeping around a bend, we saw before us a line of logs stretching across the river and apparently blocking the whole stream. On the Guatemala side of the boom was a white motor-boat, a very powerful looking craft about fifty feet long. On her upper deck stood a lean, romantic-looking Englishman, towelling himself after a bath and watching the happy antics of the negroes who still swam close about the craft. We hailed him and learned that he was Mr. Holliday, in charge of the camp of the Bradley Lumber Company situated just below the rapids on the main branch of the Sarstoon above where the San Pedro branch and the Rio Chocun flow into it. Mr. Holliday shouted out that we could get through the boom close to the bank on the British Honduras side. Sure enough, there was an opening not more than twenty feet wide between the farthermost log of the boom and the abrupt banks of the British colony.

The river began to narrow a little as we passed small tributaries whose mouths were half choked by overhanging fronds of palm and bamboo. Darkness fell on us with the abruptness with which it always

San Felipe, on narrows between Golfete and Lake Izabal

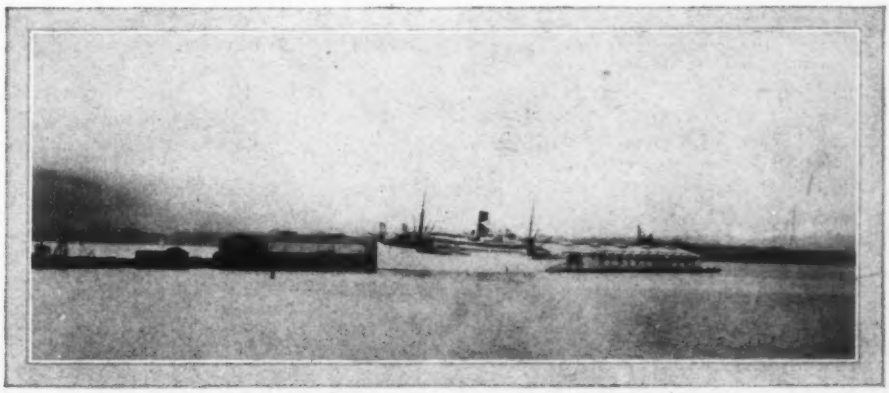
descends in the tropics. I took the steering lever from John Devil, not because I did not trust him but because I enjoyed the sensation of steering by the night stars through the opening in the trees above the river. I refused to look down at the dark water beside me and at the dim shapes of the trees on each side until I felt exactly as if Stella was coasting along a placid river through the sky.

The San Pedro branch of the Sarstoon

My reverie was broken by the distant sound of a heavy-duty motor. Another boat was overtaking us, probably the mahogany launch we had recently seen. In a surprisingly short time we saw her lights come around the bend, heard the voices of negroes singing in the bow. The voices were filled with an undertone of savagery which fitted the wildness of the scene about us, but how strange to hear in this place the orderly rhythmic beat of the machinery invented by civilized man. When the blunt bow of the powerful craft had swept past us, Mr. Holliday, leaning on the taffrail, gesticulated. Stopping the Johnson to give my ears a chance to hear what he was calling I got the impression that he was saying something about a tow. As his speed was about double that of ours I nodded a vigorous assent. Before the mahogany boat had checked her way she was a dim blot two hundred yards ahead of us. We crept up cautiously, and after John Devil had made fast the painter which they threw us I told him to relieve Stella of his weight and let me handle her alone. But I soon wished I had kept him at the bow with his *machete* in readiness to cut the tow-line, for the Stella's stern threatened to disappear under the water when the mahogany boat started forward and lifted our bow at a steep angle to the level of the river. Holliday had told his engineer to start at half speed, but even at this rate he realized with me that Stella could not be handled safely. So he stopped his craft, we took all our dunnage out of the little skiff, unscrewed the brackets of the outboard motor, and after that invaluable little engine and myself had been hauled into the bigger craft, we pulled the Stella in close to the stern of the mahogany tow boat and tried the towing again. This time it worked beautifully even when the engineer ventured to try full speed ahead.

Much as I liked John Devil's company it was a pleasure to take a comfortable chair on the broad after upper deck of the gasoline tow boat and listen to Mr. Holliday's anecdotes of mahogany cutting, treasure hunting and revolutions, while the river narrowed as we passed the mouths of the San Pedro branch and the Rio Chocun until occasionally a branch would brush against my cheek. In some places the foliage almost met from opposite banks above our heads. Twigs whispered as the superstructure of the craft snapped them, and I thought of Conrad's story, "Heart of Darkness," and of arrows flitting out of the bush with innocent little whispers.

In the comfortable (*Continued on page* 82)



Puerto Barrios, Guatemala, and the United Fruit steamer that brought me home

Dr. F. A. Kolster, inventor, inspecting a small radio compass for small boats

RADIO COMPASS FOR SMALL BOATS

Useful Navigational Instrument Now Made in Small Types

Suitable for Use on Motor Boats

By JAMES A. DOWIE

Chief Instructor, National Radio Institute

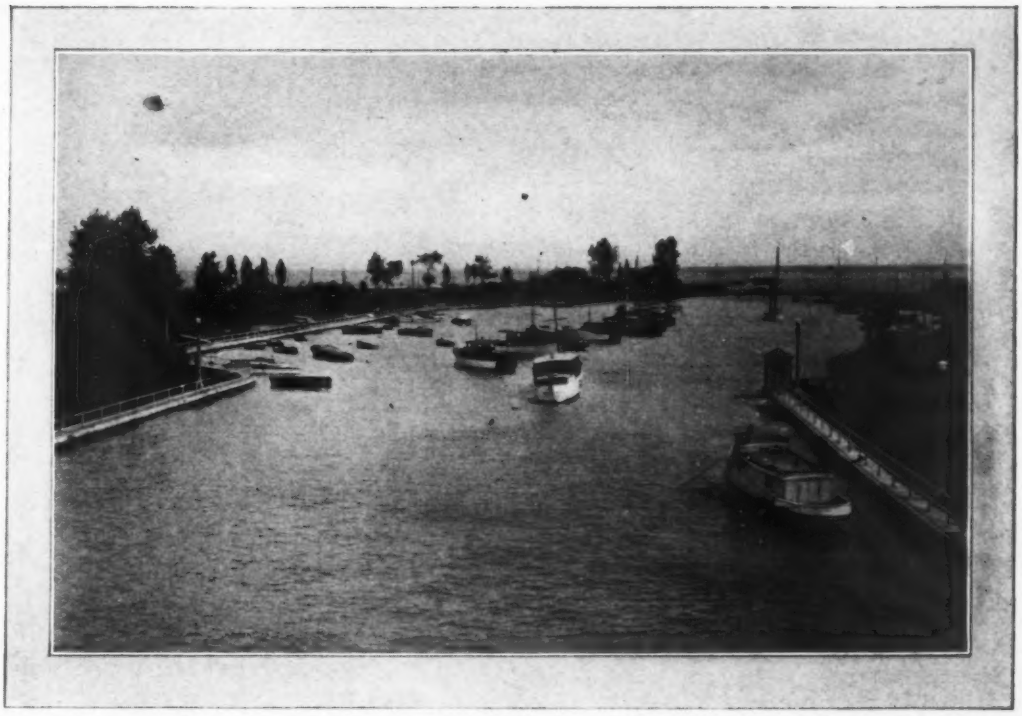
THE Radio Compass has been universally accepted by mariners and by shipping interests as an essential and important aid to navigation. During the past few years, the Radio Compass has been installed on a large number of ships and by means of this device, these ships have been able to avail themselves of the protection afforded by the Radio Beacon Service established by the United States Bureau of Lighthouses. This Service has been enlarged from time to time until today practically every light ship and important light house transmits automatically different Radio Beacon signals. The Radio Compass installed on a ship, therefore, points out from where each signal is coming, and when the pilot draws these lines on his chart, he knows his boat is located exactly where the lines cross each other. If he wants to follow one line, he points the boat right in that direction.

These Radio Beacons, which fringe the ocean and the Great Lakes, only operate in bad weather and at certain fixed intervals during clear days so navigators can check their position. If requested by any ship, however, the crews in charge of the Beacon Stations turn on the Beacons and bearings are taken on board the ship.

A wavelength of 1,000 meters was at first used by the Federal authorities for all Beacons aiding the navigator, but now, to avoid having two nearby Beacons interfere, the wavelengths are being staggered around 1,000 meters and control clocks are being used to synchronize the signals in such a way that adjacent Beacons will not be broadcasting at the same minute.

For some years, only one type of Radio Compass has been manufactured, which on account of its size and cost has been better suited to the larger vessels. The Radio Beacon Service should be available to all types of vessels, and it is particularly desirable that small vessels in coast-wise navigation be equipped with a suitable Radio Compass. The Federal Telegraph Company, therefore, has developed a small, compact, direct reading Radio Compass which may be installed readily on the smallest vessels at a very moderate cost.

With this small Radio Compass, accurate bearings on any of the established Radio Beacons can be taken over distances up to 25 (*Continued on page* 96)



Boat owners at Wilmette, Ill., find shelter for their craft in a conveniently located yacht basin

WHERE TO KEEP ONE'S BOAT

Ample Protection and Safe Anchorage for Boats Being Provided in Numerous Progressive Cities

By JOHN F. RYAN

BIBLICAL history fails to recount what happened to the Ark after Noah left it parked on a hill, but it is highly probable that Noah might have been able to use his craft in riding out another deluge, or even for an ocean jaunt, had he been provided with a proper place to keep his ship while engaged in revamping the world.

A simple wooden slip construction for small boats

The same problem, of what to do with the boat when the owner decamps for his office, has been confronting modern America in increasingly aggrevating spasms for the last several years. A number of cities have given some cognizance to the matter by constructing municipal yacht basins, but with the rapid strides which boating interest has taken, the accommodations are all too far from being adequate.

However, and in spite of the rapidly increasing interest which the waterways are holding forth, the portion of the population which has taken to boating is still small in comparison with the great bulk of the general public. It is obvious, then, that it might be improvident for a city to undertake large scale harbor improvement if only a small portion of its inhabitants were to benefit. However, it is a fact that great interest has been stimulated in the sport, pleasure and business of boating once a

Burgert Bros.

Landscaping has been resorted to as an additional factor to make this small Florida yacht basin attractive

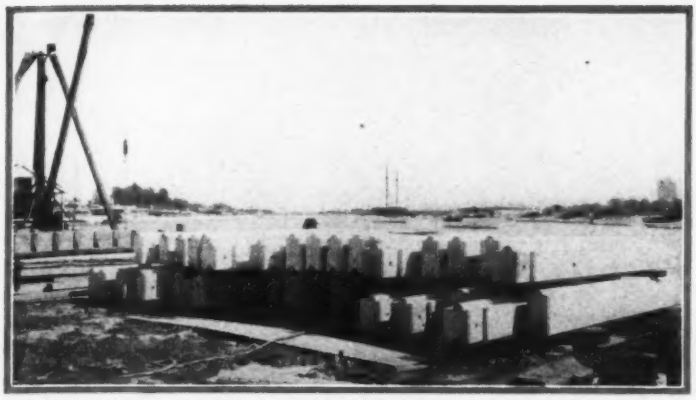
city has made harboring accommodations available at a minimum charge.

More leisure time and money are possessed by the average American today than ever before, and in his search for recreational activity he can be expected to put at least a part of these into boating—facts about the boat industry prove just that—so the matter of providing harbor space becomes of importance immediately.

Unfortunately, a boat may not be cared for in its idle hours with quite the same convenience as an automobile. The family ship cannot be run up an alley or parked in the corner garage. But the yacht basin is, so to speak, the public boat parking space wherein the owner may leave his craft in safety from the elements while he is away about his other affairs. With this idea in mind there is as much logic to building municipal yacht basins as there is to building public airports or car parking areas and one would certainly not deny the utility of these.

There are additional arguments for the municipal yacht basin which the average far-sighted community cannot afford to overlook. From the basis of yacht harbor surveys completed by Richard R. Blythe and associates, it is evident that the yacht basin can at least be made to pay for itself and, more often than not, actually provide the city with a profit. There are few municipal improvements, certainly, which can lay claim to any such performance, and this factor in itself would present a reasonable enough excuse for building a yacht basin if there were no other reasons present.

In addition to this, and perhaps more interesting from the standpoint of the average yachtsman, is the fact that ample protection and anchorage may be provided at almost amazingly low annual cost. In one large city this fee to the boat owner amounts to about



Sheet piles cast in Lincoln Park, Chicago, for use in bulkheading the Belmont harbor yacht basin. Jetting equipment and derrick are visible at the extreme left

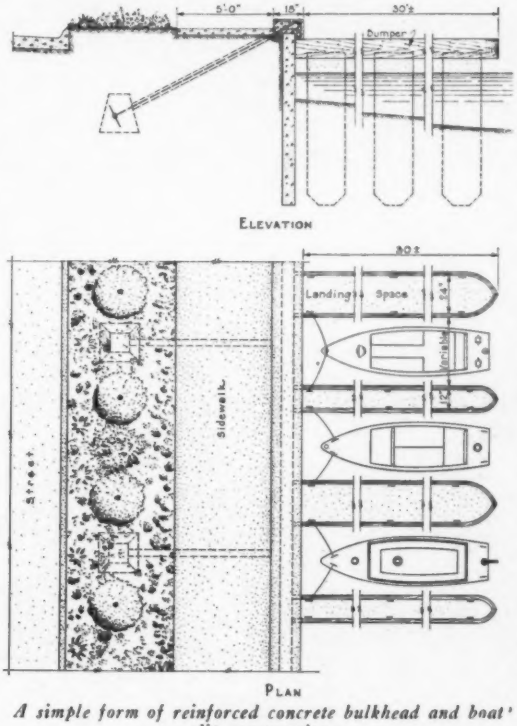
$30.00 a year while rates in other places are correspondingly economical.

The business of construction might be argued out along these lines to the mutual benefit of both the municipality and boat owner alike. The important factor in the consideration, however, is to provide an adequate plan for a permanent improvement at a cost which will not be prohibitive. Further, the basin must be accessible and it must provide adequate protection from the weather.

Too often the man who desires to promote a yacht basin for his community is wholly unequipped with information as to how the structural problems of the venture might be solved. These problems must vary of course, depending on the location of the proposed structure, but one may be allowed to sketch in a few practices, which have been found good in a number of communities.

From a study of existing basins and water front projects it is evident that the lines assume the same general form. The usual procedure is first to construct a water-tight bulkhead of concrete sheet-piles or monolithic concrete and then to build out from this wall the necessary docking or slip facilities. The wall, generally, is utilized as a retaining instrument for a walkaway or drive.

In current practice, the concrete piles are jetted in to at least half or more of the pile length. The important points to consider are that the pile has solid footing and enough lateral support to prevent ground erosion from sapping the



A simple form of reinforced concrete bulkhead and boat slip construction

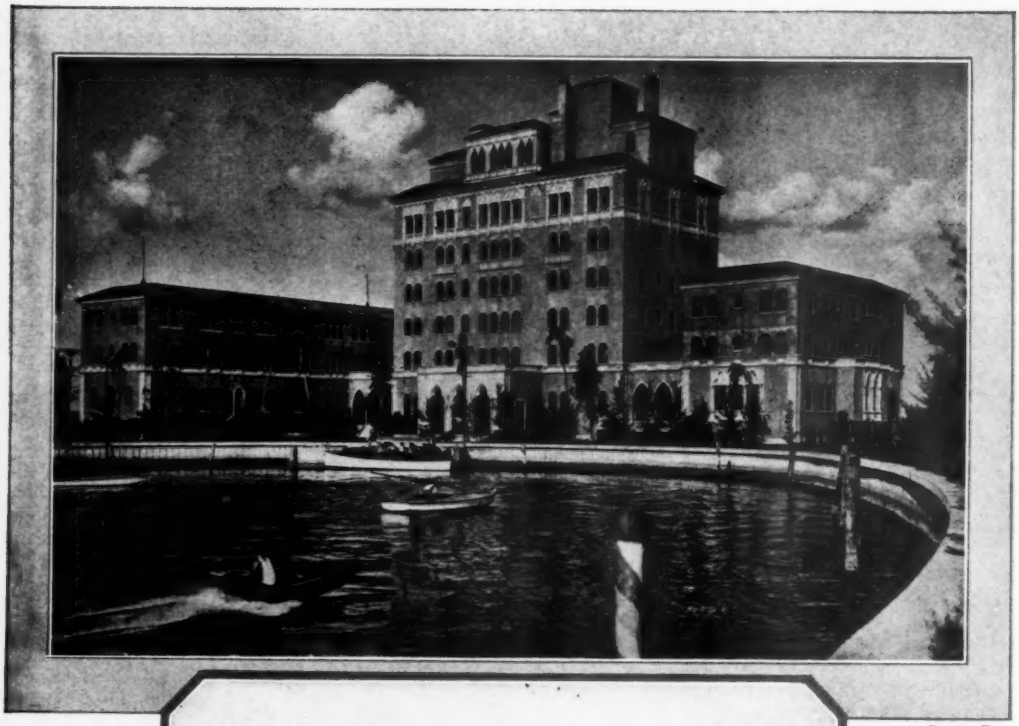
wall strength. The concrete sheet pile has grooves cast in the interlocking sides and into these channels a grout of neat cement mortar is poured until the interstices are filled —thus making a solid wall of the structure.

The concrete piles are usually capped with a monolithic beam into which retaining anchor bars are sunk. These bars extend back to the shore side and are usually embedded at the foot in solid blocks or posts of concrete. It is considered good practice to encase the anchor bars with concrete as a means of preventing destructive oxidation in the steel—thus adding to the life and utility of the wall.

With the wall in place, a back fill of sand or earth is placed, completing the back support. On top of this fill, and flush with the top wall beam, a walkway is usually laid. This may be made an integral part of the wall structure by extending reinforcing bars out of the pile cap and into the walk slab.

With the wall completed, construction of piers and slips must be undertaken with some forethought as to the present and future needs of the basin. Where such structures are to be permanent in nature they may be easily and simply provided at the same time the retaining wall is built and of much the same materials. As an example, a boat slip might be provided by jetting in piles and covering them with a concrete cap which would also serve as a walkway. One pile could be placed adjacent to the bulkhead and another pile

A tongue and groove type of slab more commonly used in seawall construction



Burgert Bros.

A yacht basin wall in New Jersey, showing exposed monolithic cap and backstay system

The boat owner is here able to take the craft literally right up to the front door

at the extremity of the slip, with other piles placed at intervals of 15 to 18 feet in between in order to furnish the proper beam support.

In construction of this sort where the structure of the slip or dock is butted against the retaining wall, it must be remembered that these are to be separated from the wall itself by means of an expansion joint. Past experience dictates this procedure in order that end thrust from the slip may not react to damage the bulkhead. It is also expedient to provide slip and dock surfaces with some sort of buffing arrangement.

When piers of a more pretentious sort are to be built the construction will vary of course according to the particular needs of the site. Suffice to say that in an average pier job of the T type, construction factors would probably involve a glorification of the same simple style which featured the building of the single boat stall.

As regards the cost of the project, engineers in one large city, report that it took only $16 to $18 a lineal foot to manufacture and place 18 and 20 foot concrete sheet piles for a typical bulkhead of the form described. Costs would undoubtedly vary depending on the problems of the individual job, but this statement furnishes at least some index for comparison.

Contrasted to this very elemental sort of yacht basin plan is the arrangement which Detroit is about to build for its boating public. Detroit has learned, from a recent experience with fire, that its construction should be permanent. On completion the Detroit municipal yacht basin will be provided with a separate firesafe well for each and every individual craft housed in the area.

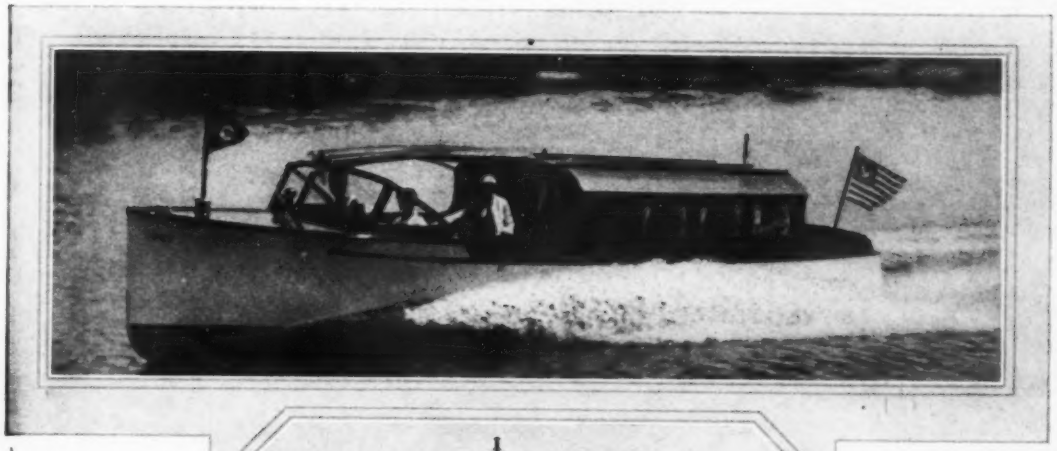
Bids have been considered for the first unit of this boat well project which, when completed, will provide housing space for craft of the runabout type. The utility of the arrangement will not be confined only to the boating season for by virtue of the fact that enclosure will be complete the wells will shield their tenant craft the year around. Hoisting tackle will be provided to permit repairs or to haul the boats out of the water for winter storage.

According to Perry A. Fellows, city engineer of Detroit, the wells are to be located on each side of a common corridor which will provide access from the land side. The architectural treatment of the enclosing structure, a reinforced concrete affair, has also been given some thought. Each well will be divided from the others by a concrete wall extending six feet below the water line.

In order to make the wells as nearly firesafe as possible the water entrances (*Continued on page* 106)

WHAT GOOD ENGINES CAN DO

Successful Boats With Scripps Engines on Both Coasts

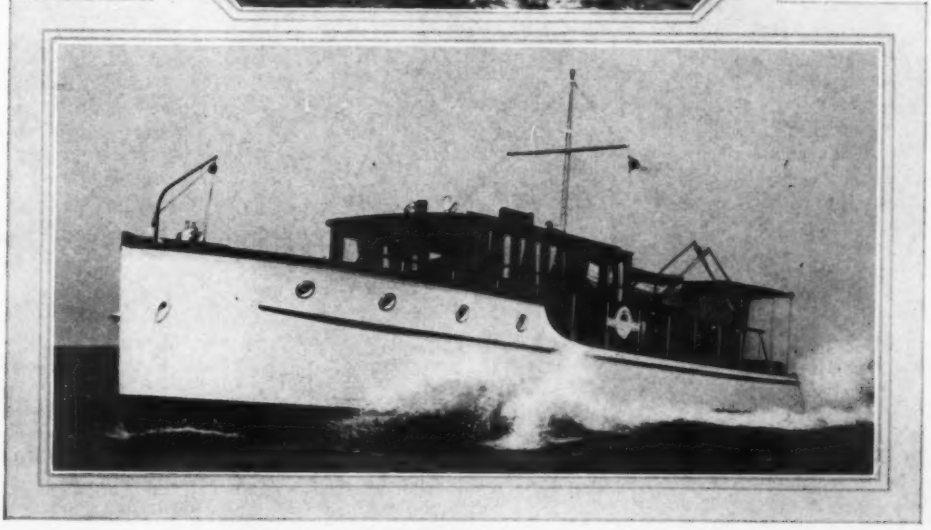


Sans Souci, a 33-foot cruising runabout with a speed of 28 miles. She was built by Stephens Bros. of California for Eldridge A. Douglass and is powered with a model 202 Scripps engine

Gurnet, a husky cruiser built for C. W. Danes of New York, by H. L. Otto of West Sayville, Long Island. This boat is 38 feet long with an 11-foot beam and carries a single Scripps model 160 engine of 100 horsepower

E. Levick, Inc.

Colonel Rheem, a 50-foot twin screw cruiser powered with model 202 Scripps engines. This cruiser was built for D. L. & R. S. Rheem by Stephens Bros. of Stockton and does 25 miles very easily



Svalan, Sweden's 46-knot racer, owned by Ivar Kreuger

SWEDEN'S PLACE IN MOTOR BOATING

Ancient Traditions Reflected in the Type of Craft Developed by the Viking of Today

THE present day descendants of the old Vikings of the North remain true to type. The Swede of today has the same desire to go down to the sea in ships as did his forefathers in the days of old. That this inclination, in the age of the motor, has meant for the Swedes in general a tendency towards motor boating is only natural. In recent years the sport of motoring on the water has experienced extraordinary development in Sweden and made converts by the thousands. At the same time boat building in the country has grown upon its ancient traditions, and the Swedish talent for organization combined with technical ability has had its effect upon and received attention in the cause of international cooperation in motor boating. To those who are not in a position to follow the special press of foreign countries this will probably come as surprising news and for this reason it is interesting to have a more detailed account of the development of Swedish motor boating and of the intensive work done for its popularization by the Royal Motorboat Club, one of the foremost motorboat clubs in the world.

The President of the Royal Motorboat Club of Sweden, Count F. F-son Wrede

Some figures perhaps will be of interest and will enable the reader to form a better idea of the development of Swedish motor boating within the past few years. According to approximate calculations—there are no official statistics on the subject—there are about 80,000 motor boats of various types, used for various purposes. This is admittedly a very high figure when it is considered that the country as a whole has only 6,000,000 inhabitants. In fact, it means a motor boat for every eighty inhabitants. Along the coast of Sweden there are about 800 boat building yards of all sizes, all building motor boats, in addition to which the majority of motorized fishing vessels are constructed by private builders.

Interest in motor boating during the course of the past

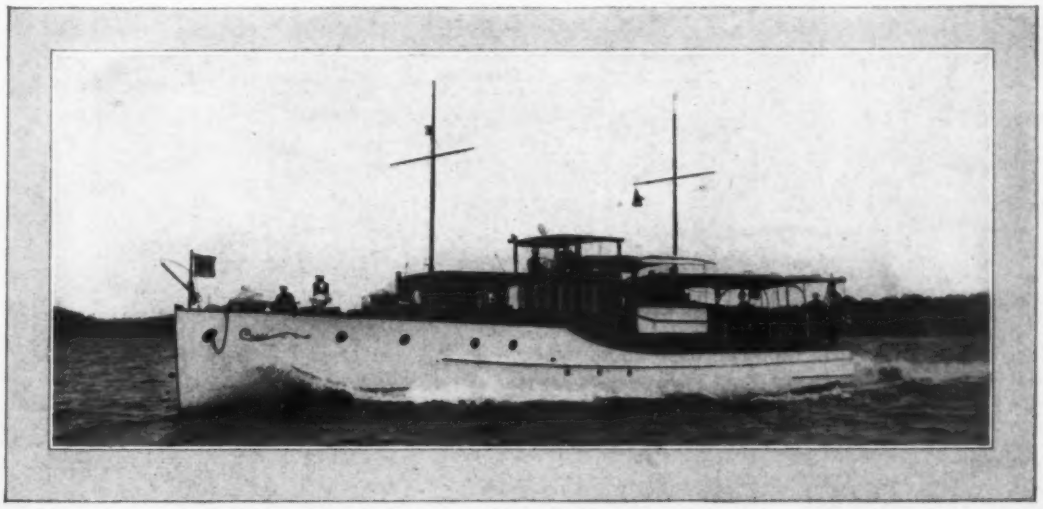
The anchorage of the Royal Motorboat Club at Stockholm with the Northern Museum in the background

two or three years has gone ahead with tremendous strides and the credit for this can safely be given to the Royal Motor Boat Club (the K. M. K.) which under its present far-sighted leader, Count Wrede, has done some extraordinary organization work and made great sacrifices for the popularization of motor boating. At the initiative of the K. M. K., the Swedish Motor Boat Union has been formed, incorporating not less than thirty-five motor boat clubs spread over the whole country, and the K. M. K., by reason of its national authority, is the leading club in the Union.

The cause of international cooperation has been the field of the mort important and widely known activities of the K. M. K., especially in technical organization matters. It was through the K. M. K. that the Swedish professor, Karl Ljungberg, had his rule for cruisers brought before an international audience. The Ljungberg rule, which was worked out some fifteen years ago, and is now generally recognized internationally, was intended to provide a measurement formula giving a theoretical ideal boat speed, with which its actual speed could be compared. The Technical Committee of the K. M. K., having on its staff a number of leading persons with the necessary scientific qualifications, has revised and evolved in its final form the present international record regulations and has given expert assistance in compiling the international competition rules for both inboard and outboard motor boats. It has also done considerable work in the handling of all the more important items in recent years on the program of the *Union Internationale de Yachting Automobile.*

From all of the foregoing it is clear that Sweden, in spite of her comparatively remote geographical position, continues to maintain her great traditions on the sea, and holds a decidedly high place in international relations in the sport of motor boating.

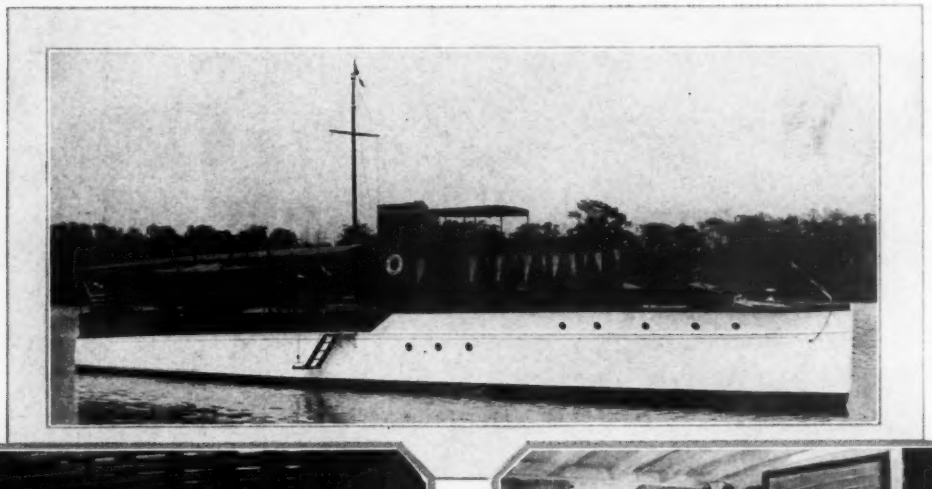
As designers and boat builders the Swedes have concentrated primarily on the production of seaworthy boats, capable of riding out the severest storms. During recent years, however, a new type has come into popular favor, a combined racing boat and pleasure motor craft. It is characterized by comfortable roominess, fine lines and considerable speed. Its popular name is the skerry cab, corresponding, as it were, to the taxis on the streets. (*Continued on page* 104)



An 80-foot cruiser designed by Carl Plym and powered with Speedway engines now in service in Florida waters

LITTLE ENGINES DO BIG WORK

Reduction Gear Drive for Large Boats Proves Its Value



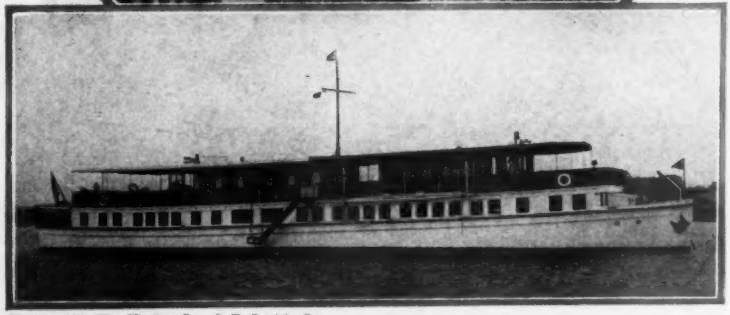
Fleet—An 81-foot heavy cruising yacht owned by E. R. Morss of Baltimore, successfully repowered with two six cylinder Sterling Petrel engines operating through reduction gears

Views looking both forward and aft in the attractive deckhouse saloon of Fleet. A protected stair leads to quarters below decks

The rebuilding of Fleet to install new engines was done by Unger and Mahon and sufficient space was saved from old engine room to permit a new 17-foot stateroom to be provided

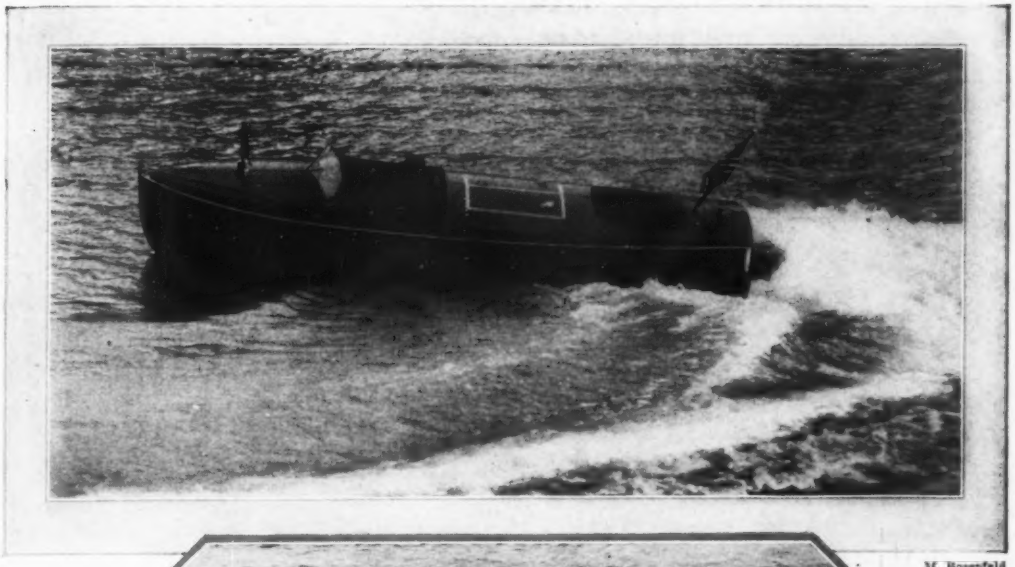
An extra stateroom was made possible through saving in space in an engine room of reduced size by installation of Sterling reduction gear engines

Old River, owned by C. K. G. Billings of Miami, was designed by H. J. Gielow, Inc., and built by the Fogel Boat Works



Old River, 130 feet long, is provided with two six cylinder sterling Petrel reduction gear engines which drive this big boat over ten miles per hour

Photographs, The Hughes Co., & E. Levick, Inc.



M. Rosenfeld

The 1930 — Dee Wite 19-foot runabout might almost be said to turn on the proverbial dime

The smaller 16-foot V B model Dee-Wite is an inexpensive and decidedly attractive little boat

RUNABOUTS FOR EVERYONE

An Attractive Series of Ten New Runabouts Announced by The Dwight Lumber Company to Suit All Tastes

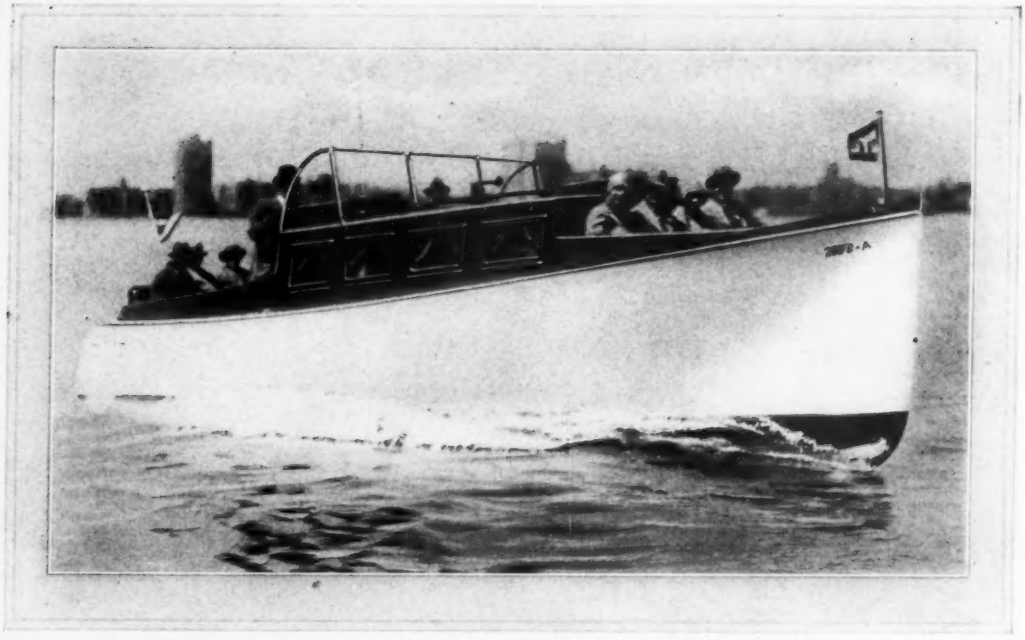
THE modern runabout with its speed and brilliant performance appeals to the boat minded public perhaps more than any other single form of boat. To this large group, the Dwight Lumber Company will make an attractive appeal with the announcement of an entirely new series of runabouts which they are to build during the year to come. This Dee-Wite line will comprise ten Vee bottom boats built in the finest style with materials and workmanship of the best quality. Most remarkable in this announcement is the selling price of these boats which will run from slightly over $500 to over $2,000. Only one of this series will be of the outboard engined type which is arranged to handle engines in both classes C and D. This particular model will be 16 feet in length and closely similar to its predecessors.

Of the remaining series all will be equipped with inboard engines which will range in size from the 4-cylinder Van Blerck of 25-horsepower to the largest sizes of 8-cylinder Gray marine engines developing 140 horsepower. Speeds in the larger and more powerful boats will come up to 40 miles per hour which is about as fast as most people will care to travel.

Much experimental work has been done in developing these new boats. Practically all of the well known marine engines have been tried in the hulls with the object of selecting the engine and boat combination which would produce at the same time the fastest and most practical boat with the lowest price consistent with the quality of the workmanship and performance of the finished craft. Some 18 different models have been built and tried before the final selection has been made. In the construction of these boats genuine African mahogany has been used liberally. All boatmen are aware of the excellent quality of this fine wood, particularly in boat construction. The framework is of first grade American white oak, as are also other structural parts, such as the chines and keels. The seam batten method has been employed over which the planking is applied with copper fastenings.

In the design of the hull itself, an ample beam has been provided on all of the different boats to provide abundant safety in handling without restricting the speed possibilities. A high freeboard has also been arranged for so that the boats are dry under practically all conditions.

The larger sizes of boats have numerous interesting features. One of these is an arrangement by which the seat back in the forward cockpit can be folded back to provide sleeping accommodations at times when the boat may be used for a hunting or camping trip. The equipment which the builder supplies will be unusually complete.



This 20-mile standardized cruiser with a Chrysler two-to-one reduction gear performs well

THE MIRACLE WORKER IN MARINE ENGINES

Reducing Costs and Increasing Efficiency with Reduction Gears

By H. E. FROMM

Chrysler Marine Engine Division

GEAR reduction engines, a type of power plant long since proven successful in commercial marine and every-day land service, has become the topic of the hour in boating circles. The pros and cons of this latest development in motor boats are bandied back and forth by amateur mariners who pride themselves on having the latest that's good.

But there are two reasons why the attentions of boat builders are being focused on the reduction gear type of engine.

First, the type of owner to whom price is second consideration is commuting by boat whenever possible. The club car of his morning train and the winding road with its increasingly heavy traffic are being supplanted by a spirited water run where smoke, and dust, and traffic jams are unknown.

For this purpose he wants a boat of the cruiser or commuter type—stylish, speedy but seaworthy and comfortably fitted with bunks, galley, an ice box and other conveniences that are necessitated by constant use.

Thus, though the engine needs to be stout and dependable, it is with a jealous eye that the designer devotes precious cabin space to the power plant. The answer, of course, is a smaller engine that will develop higher speed without losing this added efficiency when the power is transferred to the screw.

Impossible, you say. Well, that's the question on the lips of many—however, there's an answer—gear reduction—but we're getting ahead of our story.

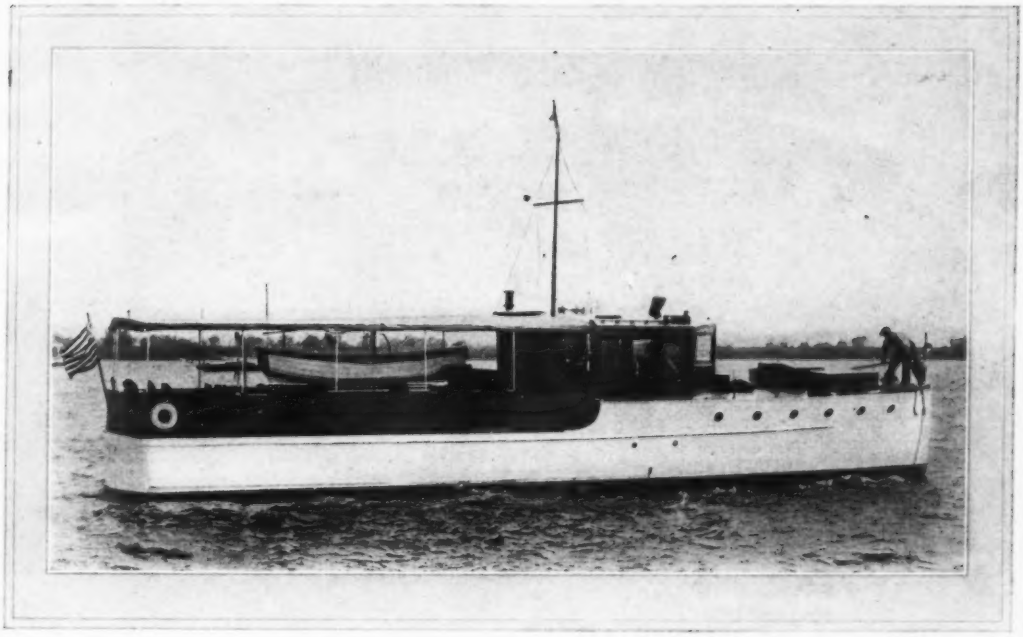
The second, and even greater reason for the widespread interest in gear reduction engines arises from the thousands who haven't owned boats before. This is the class which is flooding the Motor Boat Shows, interested not only in owning a boat but also in what a boat will cost.

Frankly, one may buy just about so much hull or engine, of a given quality, for a given number of dollars and, with respect to motor boats, the public doesn't seem to have an urge to buy second-rate goods. Walking back from a stalled motor boat is a wet job.

The only other way to buy identical quality at a lower price is to buy less of it. Hulls must be made at least of a certain minimum size to accommodate a given number of passengers, hence the engine seems to be the only variable factor. But, bear in mind that speed, power, punch is one of the most attractive promises of pleasure for these newcomers to the waterways —so a weak two-spot motor won't suffice. And, fortunately, there is a way that an engine can be built so that it's smaller, lighter, less expensive to run, more powerful in actual results and at the same time a lot cheaper—this is my means of gear reduction.

There's no mystery about it. Every time you start your automobile your little starting motor makes use of gear reduction; on a larger scale the midget motors that send a street car along the tracks function effectively and economically because of gear reduction.

Reduction gears became necessary when super-speed turbines were applied to ships because of their high operating efficiency. The turbine itself was capable

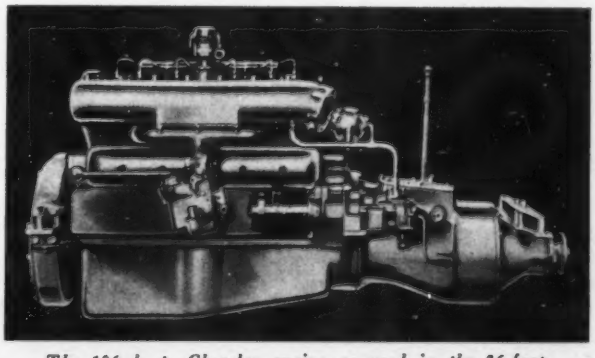


Katia, a 60-foot heavy cruiser. Powered with two Chrysler Imperial engines, she swings 24-inch propellers through reduction gears at 1300 revolutions and does 15½ miles

of an immense number of revolutions per minute, but when a screw, the usual size for a given boat and desired speed, was turned, the water resistance was so great that normal horsepower was impossible. Hence, in application, the turbine lost its efficiency. Consequently the problem was to utilize the efficiency of the turbine operating at high speed with a proper size of screw turning at normal speed.

The solution was a set of cogs in such a ratio of sizes that the turbine shaft could be turned many times while the propeller shaft turned once. That's all there was to it. The gear ratio was decided according to the speed of the turbine, the size of the screw, weight of the boat and the speed desired.

Naval destroyers furnish a plendid example of what gear reduction made possible in the field of large boats. They are fast, lean, compact, powerful—all the result of correct lines and small high-speed turbines connected with screws by reduction gears. Up-to-date ocean liners and freighters, in which cabin and cargo space has become more valuable than ever, have likewise seized upon the compactness of comparatively small gear reduction turbines. By using them, boats are enabled to make record runs without sacrificing space to large engines. On the contrary, in fact, more space has been made available for passenger or cargo use.



The 106 h. p. Chrysler engine as used in the 36-foot Wheeler Playmate turns the propeller at 1400 with a reduction gear

Now the same device that has been a success in turbines for over fifteen years is being applied with amazing results in the gasoline motor boat field. Cruisers, fishing boats and small work boats have been the first to take advantage of gear reduction in a large way.

Incidentally, it is interesting to note that in the present highly efficient, high speed gasoline engine not only is longer life the rule but the weight of moving parts is lighter. In fact, this increased length of life is a direct result of lighter piston construction despite the engines high speed.

On first thought one would expect such a combination to result in a shortening of the period in which satisfactory service would be possible, but when one realizes that the very fact of smaller and lighter pistons means less inertia, the resistance factor that tears the heart out of a motor, one easily understands what is apparently a paradox.

Technically speaking, the reduction of inertia due to smaller piston bore results in lower bearing pressure. In actual application this means that a 3⅝-inch bore by 5-inch stroke motor turning, 2,400 to 2,800 r.p.m. can have a longer life and will cost less for upkeep than the so-called heavy duty engine.

Perhaps you'd like a few figures on what gear reduction makes possible.

A six-cylinder gasoline marine engine of approximately 4¾-inch bore and 6-inch stroke, weighing 1,800 pounds and turning a screw at 1,600 r.p.m. will develop 100-brake horsepower and consume .80 to .90 pounds of fuel per brake horsepower hour.

(*Continued on page* 116)

General view of the Matthews plant as seen from the main line of the New York Central R.R.

THE CRY FOR PRODUCTION

Public Demanding Boats to a Greater Extent Than Ever While Builders Are Bending Every Effort to Keep Up the Supply

PRODUCTION — Production! — PRODUCTION!! That's the chant raised by the voices in the boat-building industry today; for never before in the history of pleasure boating has the demand for new boats been so great. And in no class is the demand more pronounced than in the cruiser class, for the public is demanding boats which contain the same comforts as do homes and apartments.

But it is one thing to cry for production—and an altogether different thing to produce—especially when the article to be produced is as large, intricate and individualistic as a cruiser. Yet there is a plant building stock cruisers today which has taken advantage of most of the good features of the much-talked-of mass production, combined them with skilled workmanship, the best of materials and an extremely high type of plant morale, and brought forth an answer to this call for production that is eminently satisfactory to the company and to the ultimate owners as well.

The plant is that of The Matthews Company, of Port Clinton, Ohio, makers of the Matthews stock cruisers. With a list of satisfied customers dating back

A view of one section of the upholstering department

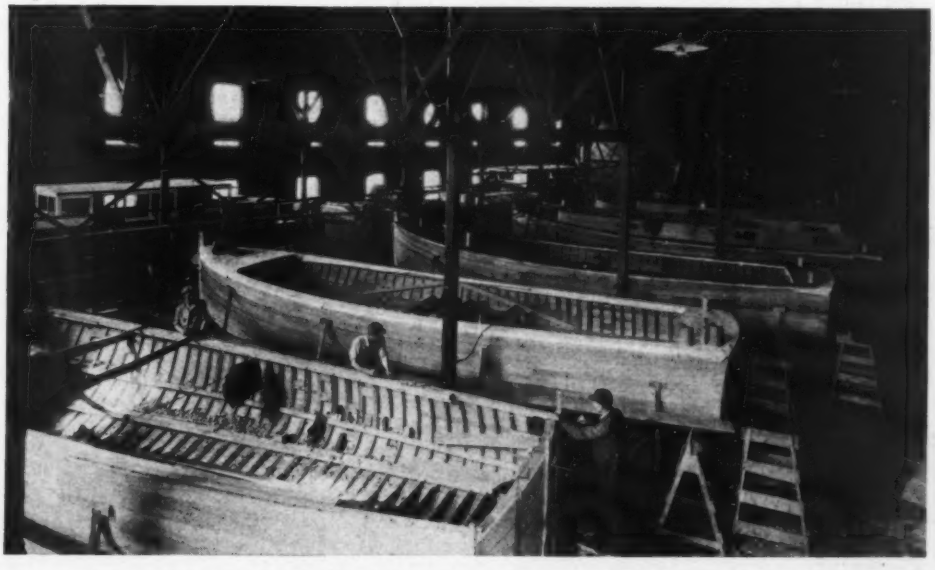
Looking south in Plant 1. To the right on the ground level a portion of the big machine shops in which special Matthews fittings are machined and milled

to 1890, when the first Matthews boat was produced, to the present time, when a fraction better than four new Matthews stock cruisers are being produced each week, on a year-round schedule, this company may well point with pride to its enviable record.

Located on the shores of Lake Erie on the outskirts of the thriving little town of Port Clinton, Ohio, the Matthews plant is in the very heart of a district which, from its very earliest days, has had a traditional love of boats and boating. From the rousing times when Commodore Perry gave tongue to that famous phrase "We have met the enemy and they are ours" (Port Clinton is but a few miles from Put-in-Bay, near which Perry fought his memorable battle; the Perry Memorial Shaft can easily be seen from Port Clinton), through wars and peace, this community has taken a proud place in maritime matters. So, back twenty-five years ago, when the Matthews Company was casting about for a suitable location for the expansion of their plant (then located at Bascom, Ohio), it was but natural that they should have chosen Port Clinton.

The present day Matthews plant is composed of a group of five main buildings and various lesser ones. It is strategically located on ground which runs from the lake front to the main line of the New York Central Railroad, thus affording ideal facilities for shipping their finished boats, either by land or by water. It provides year-round employment for upwards of two hundred and fifty artisans of the very highest type; its present production schedule calls for completion of just a few less than two hundred boats this year, with future plans calling for a quite considerable expansion.

But, to get back to the production story, which is the real reason for this (*Continued on page* 108)



Looking north in Plant 3. This view shows only the hull building department in this plant

ENGLISH CHANNEL RECORD BROKEN AGAIN

Mrs. Victor Bruce, English Sportswoman, Driving an American Boat, Beats Time of Double Crossing by Fourteen Minutes

THE English Channel is a fine old piece of water. It is as proud a piece as you will find anywhere. And it has reason to be. As far back as human record can go, we find evidence of how the Channel has cheated humans of their lives in trying to cross it. It has a darksome past to live up to, as this kind of past goes.

Back in the eighteen hundreds a man came along, you will remember, with a curious kind of machine, and said he was going to conquer it. His contraption had thin, filmy wings which he said would carry him across, above the water. The old people of the villages laughed and yet they came down to the sea that grayish morning to watch him. There on the chalk cliffs by Dover he spread his wings, amid a clapping and clattering of machinery, and while people stared, he left the ground and flew off over the cliffs, out to the sea. And as they watched they saw him hesitate still a short way off and falter. And then with crumpled wings, drop into the sea. A hush dropped over the crowd and then a low moan rose up. Folks rushed down to the boats and hurried out to save him. But it was too late when they finally extricated his body from the wreckage. Life was extinct in the daring aviator. He had died as had many others trying to conquer the Channel.

Crossing the English Channel isn't nowadays quite as hazardous. Daily ships come and go on regular schedules. Small boats dart back and forth across this same old channel, and seem quite oblivious of its treacherous currents and tides. Today it is a record crossing that people are out for rather than the mere feat of being able to get across. Swimmers strive now to beat the time of previous record holders. Men ride across on water skiis to break the time taken by other men on water skiis. And so it goes, records, always records are sought after. Motor boats even race to accomplish the crossing in shortest time.

Kay Don is one English sportsman who for years has cherished the idea of beating the Channel in a fast motor boat. Being an English sportsman nothing would satisfy him until he should have broken the record. He knew that if he could pick his time he could get a calm spell and accomplish his task. He selected Dover as the starting point and Calais as the harbor on the French coast. Well, one day the fateful time arrived and he pushed off early in the morning in his boat, a 26-foot American made Chris-Craft, by the way. The sea was like glass, and as he charged across the water he knew he was in for a record. When he raced into Calais the thought struck him that he would make a real record, and make a round trip out of it. So in he went to the checking stands, never stopped, only waved to the judges and turned back out of the harbor. He was going to make a record that would stand for all time.

The Hon. Mrs. Victor Bruce driving her Chris-Craft in a successful attempt at the English channel crossing record

Exactly 87½ minutes after he had started he drew his boat alongside the quay again at Dover. He had crossed the English Channel and back in an hour and 27½ minutes. For a trip of 45 miles he had made wonderful time. The people acclaimed him, the laurels went to the man who had made the fastest double crossing of the Channel by motor boat.

An English sportswoman heard all this, and saw what had been done, and in her heart she longed to make the same trip that Kaye Don had. The Hon. Mrs. Victor Bruce had been brought up in boats from her very youth, and she loved nothing better than to be out on the water in her fast motorboat. She had a feeling that she could better the record which now stood. So she, being of this same sporting blood, ceased to talk about it, but went aboard and made her preparations. During the summer months she had her motor tuned up and she got everything in trim for the crossing. She studied the charts and determined exactly what course she must take to allow for currents, tides and wind. It was a very exacting task that she laid for herself, because she was determined to beat that record. She was setting out in a scientific way to do it, too.

Monday, August 19, broke clear and quiet, and when Mrs. Bruce took an early morning slant at the weather she knew that the great day for her trial had come. Down to the boat house she hurried, only to find the waves lashing the dock. Due to this sea that was running it was believed best to postpone the start for a few hours. Every other condition was perfect, though, and at exactly 5:28 P. M., she left the English coast—there being almost ideal conditions. The sea was smooth and oily with only a long swell coming in from the Channel. She opened the throttle, as she had done hundreds of times before in her dreams, and her boat leaped out of the water in its eagerness to accomplish the task. Out past the harbor limits she charged and into the open sea. "It was the thrill of a life time," she later told correspondents, "something that I

(*Cont. on p.* 100)

MISTER SIMMS, A HUSKY CRUISER

Details for the Construction of an Able 36-Foot Sea Going Cruiser of Generous Draft and Displacement

Designed Especially for MoToR BoatinG

By WILLIAM ATKIN

Part II

IF this husky cruiser which we have named Mister Simms is big and wholesome as to form and accommodations she is big and staunch as to construction, too. Not one of these little cockle shells; but a real ship of a thing—a motor boat that, given sufficient fuel, is equal to going to sea any time, and staying there in comparative comfort and perfect safety. There is more peace of mind than any one would expect, and a happy sense of security as well when a well built and heavy hull is under foot, and bad weather coming on.

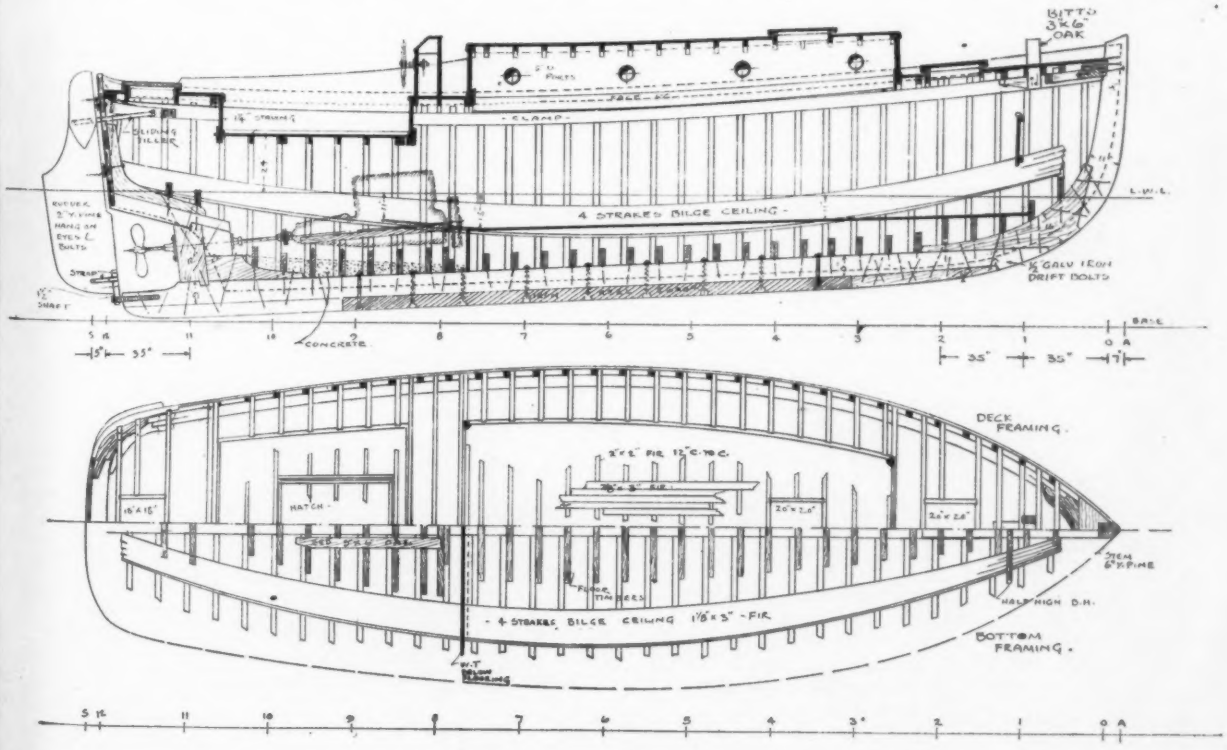
Part 1 of this article appeared previously and covered the lines, the cabin arrangements, and various other information in connection with Mister Simms. Really one should turn back to this number and regather the ideas discussed therein.

Before continuing with the construction some description of the hatch in the cockpit floor is necessary. For general summer cruising this should be made just as shown in the plans with its surface flush with the cockpit floor. In this case the joint or jamb all around the hatchway will be provided with a small gutter which will be ample to carry away any drip that gets through the joints between the hatch covers and the cockpit floor. Of course, the hatches are bound with 1/16 by 2 inch brass which projects over the edges and makes a neat finish.

If, however, Mister Simms should really go to sea the flush hatches in the cockpit floor will not do. In this event build a hatch having a coaming three to four inches high and cover with a single lid that fits down into a rabbet over the coaming. And fasten the cover down from the inside.

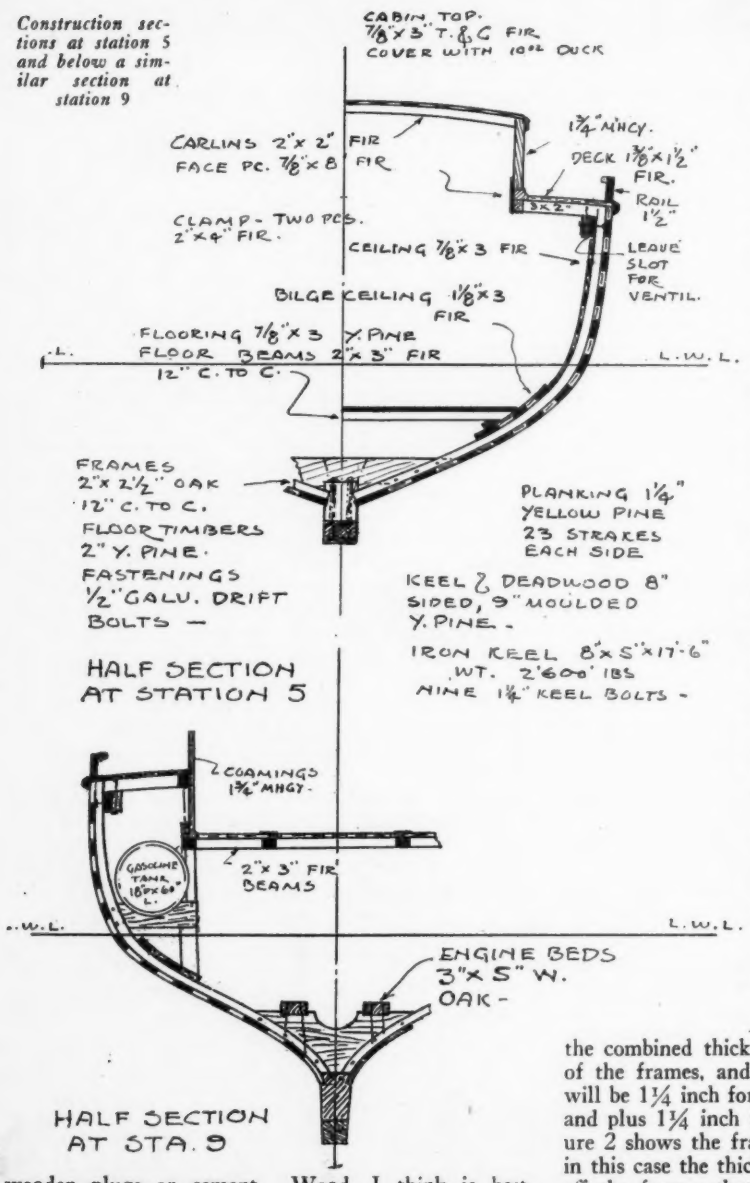
The keel will be made from yellow pine or white oak sided 8 inches and moulded 9 inches. Yellow pine in many respects is a better wood for boat building than white oak; it does not check so much as oak, nor will it soak up so much water. I used to own a very old boat and found in boring through the deadwood that the yellow pine was in its original condition, while the white oak had begun to decay.

The iron keel weighs 2,600 pounds and will be bolted to the timber keel with nine 1¼-inch diameter galvanized iron bolts. These should be arranged as follows: the two end bolts will come on the center line of the keel; the other seven will be staggered either side and off center about two inches. In casting the keel the founders will leave square counter sinks to take the heads of the bolts. After the bolts are in and drawn up tight these must be filled with



Construction plan and profile for the 36-foot sea going cruiser Mister Simms

Construction sections at station 5 and below a similar section at station 9


CABIN TOP. 7/8" X 3" T. & G. FIR. COVER WITH 10oz DUCK
CARLINS 2" X 2" FIR
FACE PC. 7/8" X 8" FIR
1¾" MHGY.
DECK 1⅞" X 1½" FIR.
RAIL 1½"
CLAMP - TWO PCS. 2" X 4" FIR.
CEILING 7/8" X 3" FIR
LEAVE SLOT FOR VENTIL.
BILGE CEILING 1⅛" X 3" FIR
FLOORING 7/8" X 3" Y. PINE
FLOOR BEAMS 2" X 3" FIR
12" C. TO C.
L.W.L.
FRAMES 2" X 2½" OAK
12" C. TO C.
FLOOR TIMBERS 2" Y. PINE.
FASTENINGS ½" GALV. DRIFT BOLTS —
PLANKING 1¼" YELLOW PINE 23 STRAKES EACH SIDE
KEEL & DEADWOOD 8" SIDED, 9" MOULDED Y. PINE -
IRON KEEL 8" X 5" X 17'-6" WT. 2'600" LBS
NINE 1¼" KEEL BOLTS -
HALF SECTION AT STATION 5
COAMINGS 1¾" MHGY.
2" X 3" FIR BEAMS
GASOLINE TANK 18" X 60" L.
L.W.L.
ENGINE BEDS 3" X 5" W. OAK -
HALF SECTION AT STA. 9

wooden plugs or cement. Wood, I think is best. There must be sheet lead washers between the wood and iron washers and these should be well covered with white lead before the nuts are threaded on and taken up for good. It is a good plan to melt parafine and pour this into the small space between the bolt and the hole; it will run like water when hot and fills every tiny check.

There are several very good preparations made for painting iron and preventing rust; among these is Tockolith, obtainable from any large paint store. I should advise painting the iron keel with this, laying on the several coats just as given in the directions on the tin. Especially should the top face of the iron be coated where it fits against the wood. A sheet of hard felt is often laid between the iron and the wood and well soaked with paint.

The deadwood will be made as shown in the plans, and from yellow pine or white oak. The deadwood will be sided the same as the keel but tapered off aft so as to form a clear run to the propeller and rudder. Where we have so much draft the keel can extend under the propeller forming a shoe, and a hanger for the rudder. The after end of the keel will be tapered to a thickness of about 2 inches.

The stem will be made from yellow pine or white oak; built up from two members as shown. It will be sided 6 inches and moulded as indicated on the plans; 9 inches at the head, 11 inches, 16 inches, where shown.

The stem will be fastened to the keel and knee with ½-inch galvanized iron bolts; the heads to be let into the face an inch or so and then covered with plugs. The deadwood and keel can be fastened with drift bolts and nutted bolts, positions of these are shown in the sketch, Figure 3.

The frame will be steam bent. These should be doubled up as shown in the sketches, Figures 1 and 2. White oak or American elm are the only woods suitable for steam bent frames. Since the finished size of the frames is 2 by 2½ inches each lamination will be 1 inch thick by 2½ inches wide. The two parts of the frames should be fastened together with galvanized iron screws spaced about 12 inches apart.

There are several methods of bending frames; but the two most generally in use are those shown in Figures 1 and 2. The former shows the frames bent outside of the bending battens. In this case the forms must be made as much smaller than the dimensions in the table of offsets (which are given to the outside of the planking) as the combined thickness of the planking, the thickness of the frames, and the thickness of the battens; this will be 1¼ inch for planking, plus 2 inches for frames, and plus 1¼ inch for battens; 4½ inches in all. Figure 2 shows the frames being bent inside the battens; in this case the thickness of the planking only is taken off the forms; that is 1¼ inch. In building a boat like Mister Simms facility must be at hand for steam-

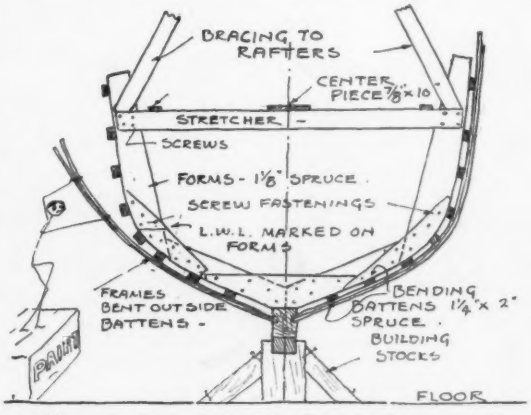


Figure 1, the method of bending the frames outside of battens

MoToR B

"MISTER

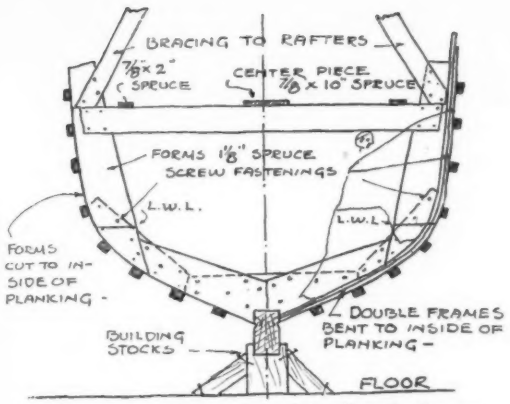


Figure 2, another method of bending the frames inside the battens

ing the frames and some of the planks. Figure 5 shows a galvanized tank fitted with a few lines of ½-inch pipe. This makes an excellent outfit. The lines of pipe are perforated with ⅛-inch holes as shown. Steam is had from a regular house heating plant or from any kind of boiler set up outside. The tank should be about one-half full of water. The incoming steam will heat this quickly to a boiling point. Oak or cedar will bend very easily after being cooked for half an hour or so in a box of this kind.

The floor timbers will be made from 2-inch yellow pine; one timber being set on the forward face of

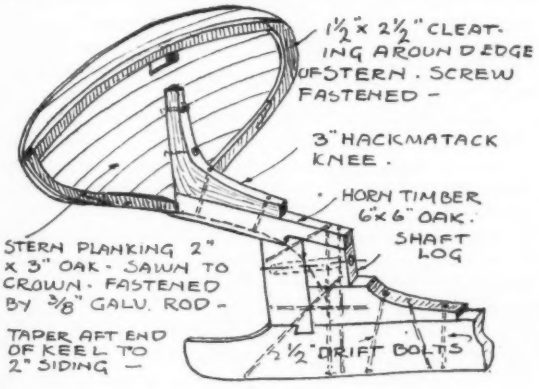

1½" X 2½" CLEATING AROUND EDGE OF STERN. SCREW FASTENED
3" HACKMATACK KNEE.
HORN TIMBER 6" X 6" OAK.
SHAFT LOG
STERN PLANKING 2" X 3" OAK - SAWN TO CROWN - FASTENED BY ⅜" GALV. ROD
TAPER AFT END OF KEEL TO 2" SIDING
½" DRIFT BOLTS

Figure 3, a detail showing the construction at the stern

every pair of frames. Use ½-inch galvanized drift bolts for fastenings into the keel, two to each floor timber. These drift bolts must be driven in at various angles for otherwise they will not hold to the best advantage. Use galvanized boat nails for fastening the floor timbers to the frames, two nails each side. Of course, these must be bored for.

The clamp and shelf can be put in as shown in the construction plan; that is with two pieces of 2 by 4-inch fir, one bent inside the other; or as shown in the sketch, Figure 6. In the latter arrangement the shelf is cut to the shape of the deck edge with the clamp sprung up under it. One way is about as good as the other. The advantage of the cut shelf is that it can be made from the laying down plan, and the chances are that with it sawn out the boat will be that much closer to the plans. The shelf will need to be made of at least three pieces well scarfed together. Otherwise there would be too much cross grain. Use ¼-inch galvanized iron bolts for fastening the shelf to the clamp and the frame heads to the clamp and shelf. If these parts are nicely finished there will be no reason for casing them in when the joiner work is being done inside.

The deck beams will be made from 2 by 3-inch fir set on edge. There should be a beam at every frame; this will place these at 12-inch centers. The crown of the beams will be 4 inches in 12 feet; this will be ample for strength and leading off water and yet not require wide lumber from which to get them out. Each deck beam will be through bolted to the shelf with ¼-inch galvanized iron bolts.

The planking will be made from 1¼-inch white cedar or Indoako wood; the latter makes a beautiful job and is the only material that will not rot around galvanized iron or copper fastenings. There will be at least 23 strakes on each side; within reason the narrower the planks are the better the planking job

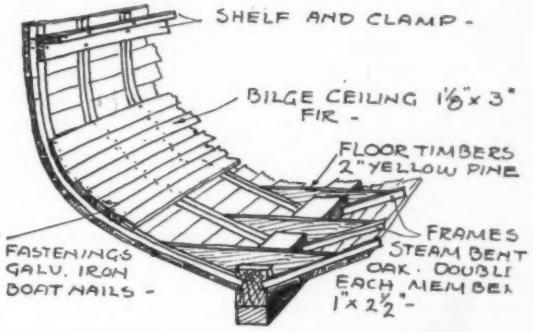

SHELF AND CLAMP
BILGE CEILING 1⅛" X 3" FIR
FLOOR TIMBERS 2" YELLOW PINE
FRAMES STEAM BENT OAK. DOUBLE EACH MEMBER 1" X 2½"
FASTENINGS GALV. IRON BOAT NAILS

Figure 4, showing how the bilge ceiling is attached

will be. On the turns of the bilge the inside face of the planks must be hollowed out so as to fit snug against the frames, and down aft under the engine where the frames make a reverse turn the inside of the planks must be planed to a convex surface to fit the frames neatly for their full width. Fasten the planks with either galvanized nails, galvanized screws or bronze screws. Screws make excellent planking fastenings and although they are the most expensive are the easiest and quickest to use. In the end there will be very little difference in the cost of the

(*Continued on page* 110)

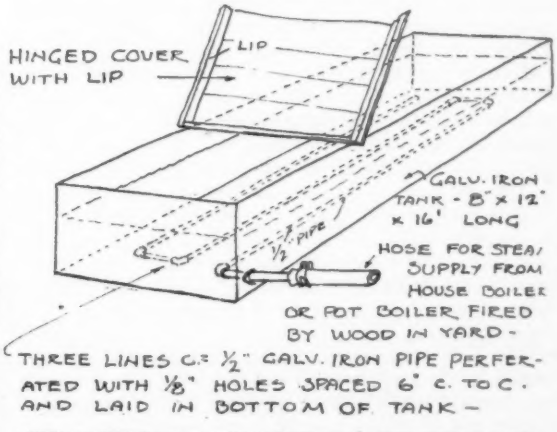

HINGED COVER WITH LIP
LIP
GALV. IRON TANK - 8" X 12" X 16' LONG
½" PIPE
HOSE FOR STEAM SUPPLY FROM HOUSE BOILER OR POT BOILER FIRED BY WOOD IN YARD
THREE LINES OF ½" GALV. IRON PIPE PERFERATED WITH ⅛" HOLES SPACED 6" C. TO C. AND LAID IN BOTTOM OF TANK

Figure 5, a convenient hot water tank in which to steam frames and planks

MISTER JARVIS—A MASTERLY CRUISER

A Big Able Vee Bottom Motor Boat with an Excellent Turn of Speed, Combined with Comfort and Seaworthiness

Designed Especially for MoTor Boating

By WILLIAM ATKIN

LAST month we had Mister Simms, and now it is Mister Jarvis; both nice big motor boats, the former a round bilge model and this a V bottom. The big difference though is the speed of the two. Mister Simms jogs along at a modest 11 miles an hour while the newer sister, or should it not be brother? slides along at a flashing eighteen. And that, if it is really 18 miles an hour is fast going. Somehow we have all gotten to think of speed as not amounting to much of anything unless it is over thirty miles an hour or so. There are however very few cruisers that really go 18 miles an hour. The best way to prove this is to get an eighteen miler and see how easily she flies by most of the fleet.

Mister Jarvis is a 38 footer, having a water line length of 37 feet, a breadth of 10 feet, and a draft of 3 feet. The freeboard forward is 4 feet 9 inches and aft 3 feet 6 inches. There is just enough sweep in the sheer to get away from absolute straightness, and this coupled with the moulded sections will produce a handsome and shipshape looking craft.

Aft, you see, this hooker is different from the usual V bottom model. Here the sections sweep down to the rabbet line which is kept well down on the keel and deadwood. The purpose of this is to permit the motor to be installed abaft the watertight bulkhead near station 7; and to keep the shaft angle as nearly level as possible. Motors do not run especially well when cocked up on one end; and it is also a sure thing that the nearer the propeller shaft is to level the better the propeller functions. The greater the shaft angle the greater difference there is in the pitch of the up-going and the down-going propeller blades. And of course the closer the pitch between the blades the better the efficiency. Actually the pitch as cast in the propeller blades is accurate; but since the water flows diagonally across the plane in which the blades revolve you can see just how it is that the angularity of the propeller shaft gives unequal values to the up-going and the down-going blades.

Here is one of the secrets of the remarkable speeds of the outboarders, I think. Some day all fast boats will be *pulled* along by tractor propellers set perfectly square to the stream of water that flows by. It is good practice in the air at any rate.

Turning back to the lines of Mister Jarvis you will find that the only sharply curved line in the underwater part of the craft is D 1. The buttocks are flat, the chines, and the water lines aft also. The result will be a bottom of good lifting power and that is what is needed when the speed begins to approach 14 miles an hour.

The keel runs right aft in a straight line giving protection to the propeller and rudder. There is however no shoe to hold the heel of the rudder because the rudder would be too deep if it continued down to the keel. I presume the blade might be made narrow and deep to offset this. Perhaps it would be best to leave the rudder as it is. I have tried the same arrangement as drawn on a great many boats and it works well enough. The rudder is on the stern, which is my favorite location. Somehow this seems to finish off the aft end of the boat and has many very practical advantages besides. John Hanna once said of me in respect to rudders that, "If Billy Atkin ever design an ocean liner I shall expect to see her steered by an outboard rudder," or words to that effect. Perhaps he is right. Now, don't forget, ye who build, that the tail end of the keel and deadwood must be tapered off sweet and fair so as to feed the propeller as nearly an endless stream of water as possible. These little things count a lot.

Once I designed a small hydroplane for a charming client in Quebec and when he had his trials, the boat would not do anywhere near the speed expected. The result. I went up there. The boat was all right, the engine all right; but the *strut!* Thick it was, and fitted with a huge bearing, unstreamlined and rough. We had a new strut made from tubing and scrap iron; light and slim and smooth. Then how the little boat flew; not another thing changed. So be careful of the little things.

In Mister Jarvis I have tried to keep the exterior as plain as possible, believing that this is the best way to build a boat. Seems to me she should be painted white from boot top to house top, all excepting the rail cap, bulwark rail and gilt cove just under the edge of the deck. Mast and all should be white, including the stern and rudder. Perhaps the house top and roof of the pilot house should be pale blue or fawn. There you have the color scheme.

The after deck is 4 feet 3 inches long and has a hatchway giving access to a handy stowage place below. The cockpit is 10 feet 10 inches long and the floor is well above the water line so as to give folks aboard a show to look around at the sea and get the joy they should. Deep cockpits give the feel of being cooped up. There is a large flush hatchway over the engine because this is the only opening through which one can get at the motor.

The cabin trunk is 15 feet 10 inches long and not so wide as to cut down walking space around the deck. The pilot house, or windshield, whichever you wish to call it, covers the companion way and does not extend abaft the cabin trunk. The top covers about half the cockpit, leaving the rest open to the weather. A desirable arrangement from a great many angles. In connection with this I note a tendency to get away from awnings and trick tops, tops that I used to call birdcages. The forward sash in the pilot house are arranged to open, but those in the side are fixed.

There is a rail all around the boat 7¼ inches high including the cap. This is secured by placing a top timber every three feet and also by drift bolts into the waterways. Along the lowest part of the sheer the rail is cut out so as to leave (*Continued on page* 112)

SMALL MOTOR BOATS

Their Care, Construction and Equipment

A MONTHLY PRIZE CONTEST CONDUCTED BY MOTOR BOATMEN

Questions Submitted for the March Contest

1. Show how a simple Pelorus may be constructed and also explain its practical use.
(Submitted by F. W. L., W. New Brighton, N. Y.)

2. Describe and illustrate the best method of installing storage batteries in boats, so as to protect the batteries from water and the hull structure from electrolyte spillage.
(Submitted by V. L. S. Wilmington, Del.)

ENGINE RENEWALS, REPAIRS AND CHANGES

The Winter Season Is an Excellent One to Undertake a Careful and Deliberate Inspection and Overhaul of the Boat's Engine

Answers to the Following Question, Published in November MoToR BoatinG

Describe and illustrate what repairs, renewals or changes should be made to your power plant during the winter months

PUTTING AN ENGINE IN SHAPE

(The Prize-Winning Answer)

WHEN a motor is removed from the boat and overhauled in comfortable quarters during the winter lay-up, or when the boat is laid up in a building which can be readily heated, the conditions for winter repair work are ideal.

Such situations allow the work to be spread over several weeks of careful, methodical overhauling as compared to the frantic, careless work which usually accompanies late spring or early summer repair work.

To put one's motor in the best possible condition during the lay-up season is the best guarantee that the following summer will be one of pleasure, as far as freedom from mechanical trouble is concerned. The modern motor, with pre-season care, will go through a season with little or no trouble. Some owners, blessed with a good working outfit, seem to labor under the impression that such a motor, fed gasoline and oil, will run indefinitely. They sooner or later find out that a motor, despite the fact that it is made of steel and iron is subject to wear and tear and the less care, the more wear. The first step in overhauling a motor is to provide one's self with a sheet of paper and a lead pencil, in order to tabulate the work which is to be done on the motor and to systematize it.

Draw two vertical lines the entire length of the paper so as to divide it into three equal columns. For the sake of convenience, mark the columns A, B and C.

In column A should be enumerated all the work which can be done by simply repairing certain conditions as found.

In column B record the work which embraces replacements whole or in part and in column C list all work which presupposes outside mechanical operations.

For example, in inspecting or in removing the motor from the boat the secondary wiring will be brought to one's attention. If the wire is frayed in spots or if it presents a decidedly oily exterior, it is best to write secondary wires in column B.

Perhaps the spark plugs will be the next to engage one's attention. They may be only slightly pitted. This falls within the work designated by column A.

By the time the motor is pulled down the average work sheet so made out will look very much like the following: Column A:—Spark plug points, scrape bearings, starter brushes, generator brushes, distributor points, reverse gear plates, oil gauge line, sediment in water jacket, valves reground. Column B:—New rings, wrist pins, exhaust valves, secondary wires, resistance unit. Column C:—Generator commutator resurfaced, rebuilt battery, carbureter fuel level and

RULES FOR THE PRIZE CONTEST

READERS are urged to consider the above questions for the March, 1930, issue and send answers to them to the Editor, MoToR BoatinG, 57th Street at Eighth Avenue, New York, N. Y. Answers should be (a) in our hands on or before January 25, (b) about 500 words long, (c) written on one side of the paper only, (d) accompanied by the senders' names and addresses.

The names will be withheld and initials used.

QUESTIONS for the next contest must reach us on or before January 15. The editor reserves the right to make such changes and corrections in the accepted answers as he may deem necessary.

The prizes are: For each of the best answers to the questions above, any article or articles sold by an advertiser advertising in the current issue of MoToR BoatinG of which the advertised price does not exceed $25 or a credit of $25 on any article which sells for more than that amount. There are two prizes—one for each question—but a contestant need send in an answer to only one if he does not care to answer both.

For answers we print that do not win a prize we pay space rates.

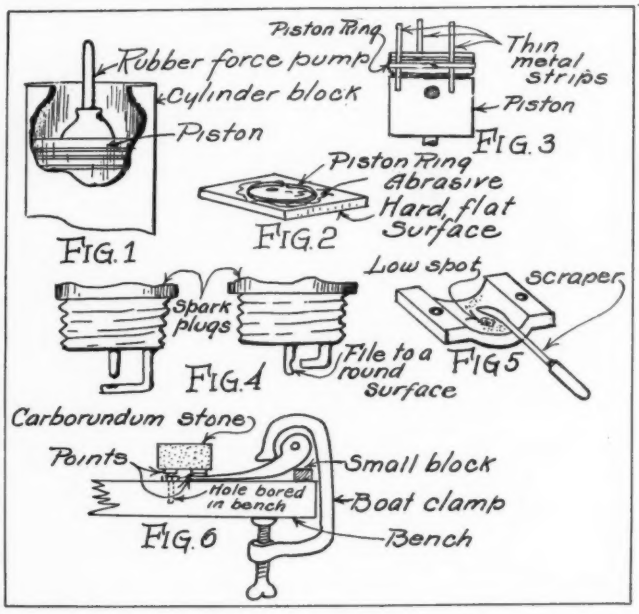
For each of the questions selected for use in the following month's contest, any article or articles sold by an advertiser advertising in this issue of MoToR BoatinG of which the advertised prices do not exceed $5, or a credit of $5 on any article which sells for more than that amount.

All details connected with the ordering of the prizes selected by the winners must be handled by us. The winners should be particular to specify from which advertisers they desire to have their prizes ordered.

float adjustment. The foregoing list is not unusual for the motor which has been given ordinary care. Outside of new rings, new wrist pins and the resurfacing of the generator commutator, it will be the exception, rather than the rule that any motor which has seen consistent use during a season will not require attention as directed above.

Carbon deposit and ragged points on spark plugs are harmful. Remove the carbon and file the eaten points to a round surface. High voltage electricity jumps readily from point to point, hence rounding the surfaces of the points until they are cylindrical in form helps to maintain the high voltage. If square edges were better, manufacturers would make them such. (Fig. 4)

Putting bearing blue on worn bearings (Fig. 5) assembling the part and turning it over several times will show up the low spots, since the points of no contact will be dark colored. Scraping away the babbitt uniformly until no darkened areas remain indicates a perfect fitting bearing. (Fig. 5)



Methods suggested by J. E. M. to facilitate engine overhauling

Starter and generator brushes must be sanded in when contact is poor. Cut strips of fine sandpaper the width of the brush, pass a strip beneath the brush and rotate the armature so that in turning, the rough surface of the sandpaper will cut away the bearing surface of the brush until it conforms to the curvature of the commutator.

Distributor points which burn out often do so mainly because they do not make perfect contact. If the stationary point is fitted into a hole bored in a bench or in a block fastened in a vise, care being taken that the hole is vertical and the moveable arm fastened as shown in Fig. 6, the surfaces of the points can be ground in a manner so as to allow them to make contact properly when reassembled.

The small block of wood under the moveable arm can be moved forward or backward until by trial the arm is in the correct position for honing.

Reverse gear plates, oil gauge line and sediment in water jacket will mean thorough cleaning out of the deposit which will form in transmission grease, oil and in water. Flushing with gasoline, aided by mechanical means or air pressure generated by a tire pump will do the trick.

In regrinding valves, one item of advice cannot be repeated too often even for the man who is an old hand at regrinding valves—grind slowly and lightly. Even if the valves surface well, if the surfaces are scored by the use of fast abrasive applied with great force, the job will not be much of a success—not a lasting one at least.

The use of an ordinary plumber's force pump (Fig. 1) will determine loose pistons, rings, wrist pins or connecting rod bearings. Place the pump on top of the piston, pump it up and down until suction is established and it will hold the piston in a vise-like grip and enable one to move the piston in all directions which its looseness will allow.

Fig. 3 shows a well established method of getting the second and third rings into position, while Fig. 2 shows the orthodox manner in which new rings which are a trifle too wide can be made to fit in their grooves. Grinding compound is placed upon a smooth, flat surface after which the ring is rubbed thereon with a circular motion will do the trick.

New wrist pins should be fitted with the aid of a reamer. Badly pitted exhaust valves should be replaced with new and the particular man will fit new exhaust valve guides at the same time.

The open type resistance unit means yearly replacement for the best results. Often times a badly performing battery can be made good as new by the putting in of new plates to replace those which were not up to standard. Incidentally cheap batteries should be taboo to the motor boat man. If a motor carbonizes rapidly when rings are tight, have a carburter expert look to the gas level of the carbureter cup. A too rich mixture caused by an incorrect gas level is an insidious but persistent nuisance.

J. E. M., Norwich, Conn.

AN ENGINE INSPECTION

THE repairs, renewals or changes which may be required to a power plant will, of course, depend on the particular engine in mind. However, for the purpose of this illustration let us assume a general overhauling. Before the engine is dissembled it is important to know just what happens in an internal combustion engine while in operation, this knowledge will make it easier to determine what must be done in the way of repairs, renewals or changes.

The combustion of the fuel charge in the combustion chamber produces: First, heat, which sometimes injures the valves, anneals the piston rings, thus reducing their tension, forms carbon which retains the heat; second, carbon, which deposits in the combustion chamber, in addition to retaining the heat, causes knocking, fouling of spark plugs, pitting of valves and valve seats, binding of piston rings and also the binding of valves; third, pressure, which causes a load on pistons, wrist pins, connecting rods and main bearings, causes side thrust on the cylinder walls wearing them oval, and causes wear on the piston rings, and also on the

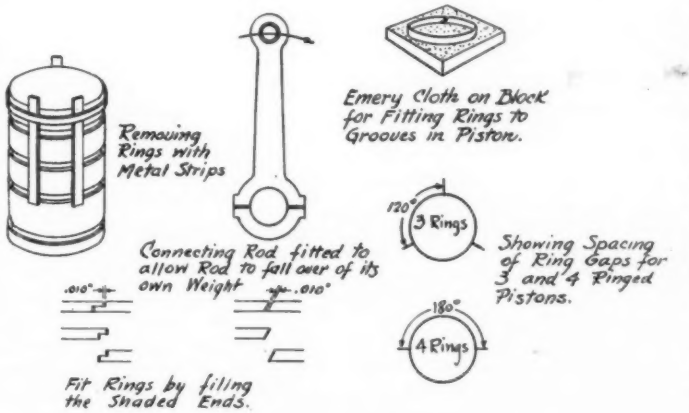
pistons; fourth, moisture, which corrodes the exhaust valve stems, and rusts the exhaust system. Other destructive forces are found in an unbalance in the flywheel and crankshaft, tending to pound out the bearings, causing the engine to vibrate, thereby loosening it and causing excessive wear; the arcing between the breaker points causing the points to corrode and pit, also the normal wear on bearings, gears or chains in the camshaft, pump and other drives and connections.

An inspection of the engine after it has been taken down should of course include all of the parts mentioned above, and also should include an inspection of the electric wiring, switches and wire terminals.

The engine should be placed in some convenient, well lighted place, the cellar or garage at home if possible, before the dismantling is begun. Some overhauling may be done in the boat, but where it is possible to remove the engine, this should be done. The engine should be first well washed down so as to remove all oil and grease, and all parts should be well cleaned as they are taken off, placed in boxes for safekeeping. Carbon may be removed more easily if first loosened with kerosene oil. The crankcase should be drained and cleaned, and any strainers in the oiling system should be carefully cleaned. Parts which may be excessively worn or broken should be listed for replacement before the assembling is begun. This will avoid unnecessary delay. A can of anti-rust spring oil, such as is used on auto springs will be found useful in loosening rusted parts.

In assembling the engine, the crankshaft bearings should be examined, carefully scraped where necessary and tightened so that the flywheel will turn over without undue effort. Fit one bearing at a time, trying the flywheel each time. Then the connecting rod bearings should be examined and scraped where necessary and tightened just enough so that the connecting rod will just about fall over of its own weight. The wrist pins should fit the bushings without too much play, about .003 inch would be about right. If new bushing are required it is suggested that this work be done in a shop as new bushing will have to be reamed out to the required diameter.

The piston rings should show even wear all around, and this can be determined by examination of the rings. The rings should show an even bright surface all around. Dark spaces on the surface of the ring, or if the ends of the rings are broken, will mean new rings should be supplied. New rings should be fitted so that they slide easily in the ring grooves of the pistons to which they belong, and should be given proper end clearances. With the ring in its groove, slip the piston in the cylinder, letting the ring rest on the cylinder and examine the gap, keeping the ring square on the cylinder wall. Space the gaps 120 degrees apart on pistons having three rings, or 180 degrees apart in pistons having four rings, alternating the gaps so that they do not come in the same line.


Removing Rings with Metal Strips
Emery Cloth on Block for Fitting Rings to Grooves in Piston.
Connecting Rod fitted to allow Rod to fall over of its own Weight
.010"
.010"
120°
3 Rings
Showing Spacing of Ring Gaps for 3 and 4 Ringed Pistons.
180°
4 Rings
Fit Rings by filing the Shaded Ends.

F. W. L. illustrates some hints for convenient engine repairs

The valves should be ground after refacing the valve seats and the valves, after which the adjustment between the valve stem and push rod or tappet should be made. This adjustment should allow proper clearance to allow the valves to seat when the engine is hot, and is generally greater for the exhaust valve than for the intake valve. The clearance should be fixed at about .025 inch cold and after the engine is well heated brought down to .004 or .005 inch, or as specified by the manufacturer.

The wiring system should be examined for breaks, defects, defective insulation, loose terminals, etc. Timing gears are generally punch marked, and must be reassembled in the same position as they were originally found so as to insure the proper timing of the engine. Failure to observe this will result in the engine being out of time and making it impossible for the engine to operate at all.

The carbureter is carefully examined, the float chamber cleaned, strainers cleaned, the float examined, if float is of metal construction, examined for any holes, or if of cork should be thoroughly dried and shellacked. Needle valve showing any signs of wear either on the needle or its seat should be replaced by new parts.

Engines having demountable cylinder heads should in most cases be provided with new cylinder head gasket. This also holds for other gaskets. New gaskets should be carefully shellacked in place. Hose for water connections should be replaced with new hose clamps, so as to insure tight connections.

In cases where the engine is overhauled during the winter and is not to be used immediately, fill the crank case with oil, also pour some oil on the piston heads. Then turn the flywheel over a few times to spread the oil.

Prior to replacing the spark plugs, examine them and clean them carefully, also adjust the spark gap. Spark plugs with cracked or broken porcelains, or with badly burnt or pitted electrodes should be replaced by new.

After the engine is first put in operation, run with a generous supply of oil, as the tightened bearings and new piston rings will heat up a little more during the first few hours of running.

Let the engine run for the first few hours while tied to a dock to loosen and wear in the bearings, also to make certain that everything is in good working order. The oil should be changed after about 25 hours of running. As in the case of a new engine the rebuilt engine should not be speeded up until after the parts have been worn in properly.

It is well to remember that a deliberate and careful job will preserve the life and condition of an engine greatly, while a hurried and careless job may do injury to put the engine in worse condition than before.

F. W. L., W. New Brighton, New York.

(*Continued on page* 114)

WHEN THE STARTER STICKS

Releasing a Starter Pinion Which Has Jammed Not a Difficult Task if Properly Done

Answers to the Following Question, Published in November MoToR BoatinG

Explain how to free a jammed electric starter and give precautions to guard against jamming of the starter

FREEING A JAMMED STARTER

(The Prize-Winning Answer)

SOME of you can recall the days when it took considerable hard work to get even a small engine started. After much priming and turning, then more priming and turning, the engine started; only to die again after a few explosions. But, those were the happy days. We were boys then and any sort of work around a boat, no matter how hard, was just play so long as the engine finally ran and we got a ride in the boat.

Today, marine engines follow the automobile engines very closely in operation and conveniences. Gone are the days of back-breaking cranking. An electric starter turns the engine over until she draws gas and fires. It is just as simple as it sounds until the starter jams or sticks. Then, even a crank is of little avail, and you cannot put the boat in gear and rock it back and forth until the starter pinion flies back, as with the automobile. In the case of an automobile, if the starter pinion does not fly out, part of a tooth may be stripped from the ring gear. A starter that has stuck once will do it again unless attended to.

A method used on some automobiles is free from jamming and other troubles. This method is fine for fitting an electric starter to an old engine. The crankshaft carries a ratchet sprocket or an over-running clutch. The engine is turned by means of a chain from a sprocket driven by the starting motor through a spiral reduction gear. A broken chain is all that can happen to the starter drive and new links can be bought at any motor cycle store.

Most marine electric starting systems employ the Bendix drive. Its popularity on both automobile and marine engines is sufficient proof of its reliability. As the starting motor spins, the pinion is thrown to the ring gear which it engages and turns the engine. When the engine starts, the pinion is driven faster than the motor armature and automatically return to its disengaged position when the circuit is broken to the starting motor. With this method the battery is located close to the engine and the starting circuit made through a press button switch which may be either hand or foot operated. As the starter cables should be kept as short as possible and the engine is seldom close to the steering position, a magnetic relay switch is used. The magnetic switch is located close to the engine and may be operated from a steering position forward or from several places widely separated. A small switch right under the operators hand closes the magnetic switch and the engine starts.

If kept clean, no trouble will be experienced with the Bendix drive. Sticking is caused by dirt and gummy oil on the starter pinion shaft and on the spiral engaging mechanism. Corroded connections on the starter cables and a weak battery are contributary to the sticking, although not the direct cause. When the starter jams, do not get excited and cause more serious trouble. A jammed starter is nothing to get excited about. It is an everyday occurrence and easily freed. On some engines, depending upon the condition of the drive, the starter can be freed by pushing on the crank and tapping the end of the starter shaft or the starter spring. Turning the engine backwards over so little will help, but generally there is no provision made for this. A large pipe wrench on the shaft of the flange coupling hub with the gear in, or a bar against the hub and one of the flange bolts may help. This prying operation should be carefully done. Sometimes, loosening the bolts or screws holding the starting motor to the flywheel housing will allow the pinion to fly back away from the gear.

Trying all these makeshift methods will take longer than the proper procedure. When the starter jams, remove it and clean the parts of the drive. You can get into no trouble by removing the starter so long as it is replaced in the original position. With some systems it is not possible to get the starter in the wrong position owing to the bolt holes being unevenly spaced for just that purpose.

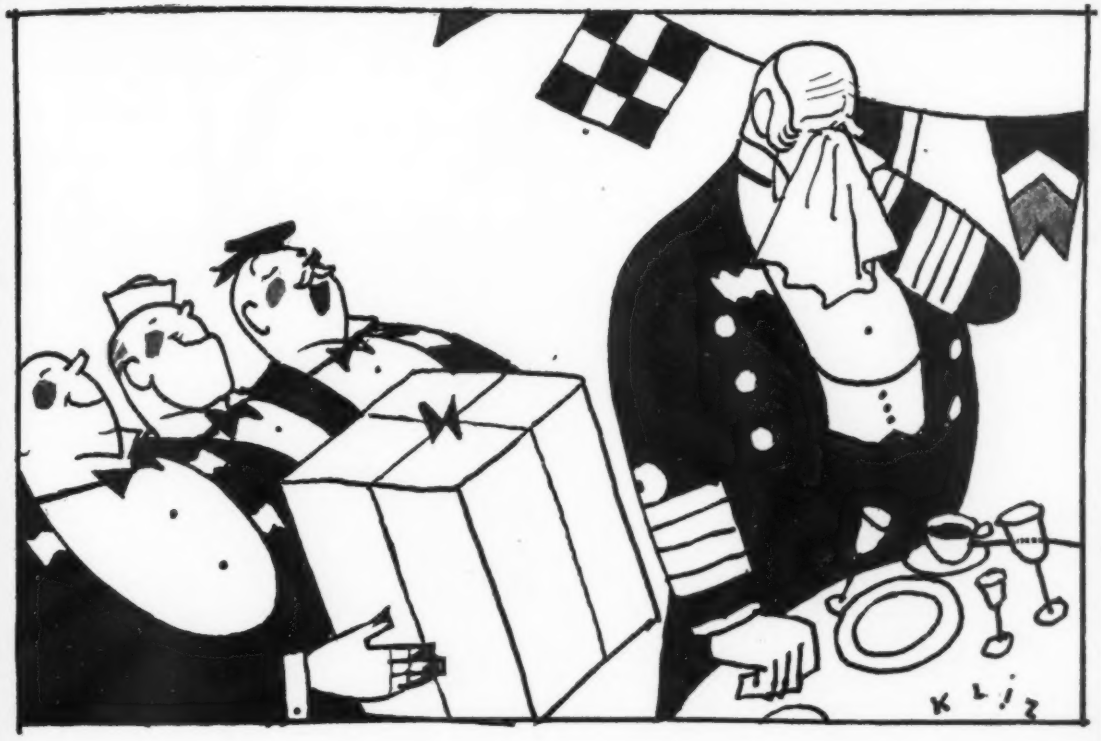
To remove the starting motor disconnect the cable leading from the positive terminal of the battery. This should be the ground wire. Removing the cable will break the electric circuit to the starting motor, and prevent the short circuiting of the battery in case one of the starting motor leads should touch the engine. It is also a precaution against fire. Disconnect the cable attached to the starting motor and the bolts holding the starter to the flywheel housing can then be removed and the starting motor and drive removed as a unit. If the engine is not too large to be turned over by hand, insulate the connection or cable terminal with tape and tie it clear of the engine. Replace the battery cable and run without the starter.

Before replacing the starter, clean the drive mechanism thoroughly with gasoline and a cloth that is free of lint. Do not use waste. It is linty and stringy. A clean starter won't jam. Saturate the cloth with gasoline and rub every part until there is no trace of oil or dirt on them. Then dry with a clean cloth. Any rough spots may be smoothed with a fine file and an oil stone. Do not oil or grease any part of the drive. It is intended to work dry. When clean and dry the parts should spin freely back and forth on the shaft. The only lubricant that will not cause trouble later, is fine flake graphite. The graphite should be rubbed on the parts and these moved to distribute the graphite. Graphite alone will smooth the surface and leave them in condition to work freely and graphite will not collect dust. Any oil will, in time, collect dust and become gummy. It only takes a little gummy oil to cause a starter to stick.

Keeping the starter drive clean and free from oil is the best protection against a jammed starter. Clean connections make good electrical contact and help to give the starting motor the snap that spins the engine smartly. Keep the battery fully charged. A low battery does not give the engine the peppy turnover essential for good starting and when the battery is low, the starter draws so heavily on the current that the ignition is weakened.

W. B. M., Newburgh, N. Y.

(*Continued on page* 116)



A Gift *to the* Outgoing Commodore

THE Old Skipper is retiring. He has spent some time (and some coin of the realm) piloting the Club fleet through regattas and cruises, dinners and vaudevilles. But the last duty of making a farewell speech looks like the thickest weather he has ever met. He plots his course through a fog of words, jury-rigs a few metaphors, and finally limps into a verbal port, flying a flag of distress and leaking a bit about the eyes.

Then is the precise moment for the Steward to lay before him the best gift of grateful clubmates—a service of Ovington Yacht China, each piece emblazoned with the Commodore's own flag and the flag of the Club he served so well. Affection and a full appreciation of his services are lashed together in this sea-going gift.

Nor need the other members envy it unduly. Should you, too, wish to cheer coming cruises, a right little, tight little service for six costs but $63, crystal to match for as little as $37. Every piece will be marked with the flags of your yacht and club, and only three weeks required before you can ship and sail with it.

"Gifts from all over the World"

OVINGTON'S

437 Fifth Avenue
New York, N. Y.

Telephone: Caledonia 8702

M. Rosenfeld

A 54-foot A. C. F. cruiser being hoisted aboard a lighter at New York and transferred to a freighter bound for Los Angeles via the Panama Canal

YARD AND SHOP

Notes of Interest to Both Owner and Manufacturer

NEW DIESEL CRUISER

ONE of the smart Diesel Cruisers to come out in 1930 will be an 80-footer for J. T. McMillan of Detroit, Mich. The designs were developed by the Consolidated Shipbuilding Corporation, at Morris Heights, New York City, where the boat is also building.

Two cockpits and large deckhouse are features in the arrangement plan. The large deckhouse is followed by the owner's suite.

The power plant consists of two 300-horsepower each type V Treiber Diesel engines, which will give the boat an estimated cruising speed of 16 miles.

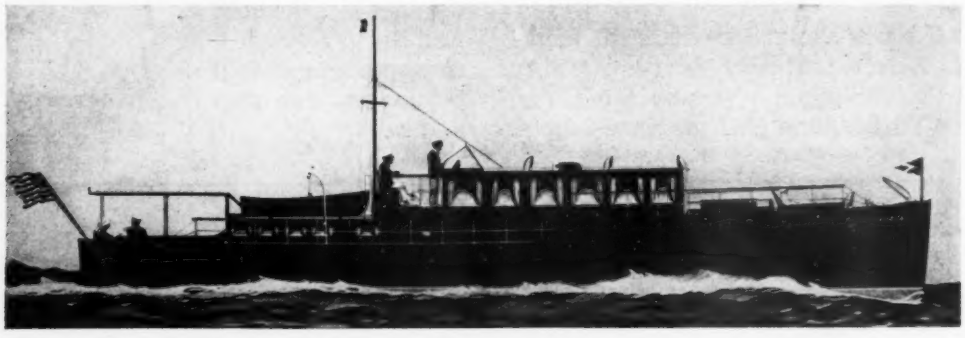
The hull will be double-planked, painted black; the deckhouse and trunk will be mahogany, as well as all interiors.

CHAMPION ANGLER USES STOCK RUNABOUT

Catching a tarpon has been classed as the supreme feat of any angler's career, but to William (Bill) Vogt, catching one from a Chris-Craft speedboat has certain advantages that make the occasion really memorable.

Mr. Vogt, whom sporting periodicals have long hailed as the world's champion angler, was at Port Isabel, Texas, not long ago, when word was brought to him that tarpon

(*Continued on page* 64)

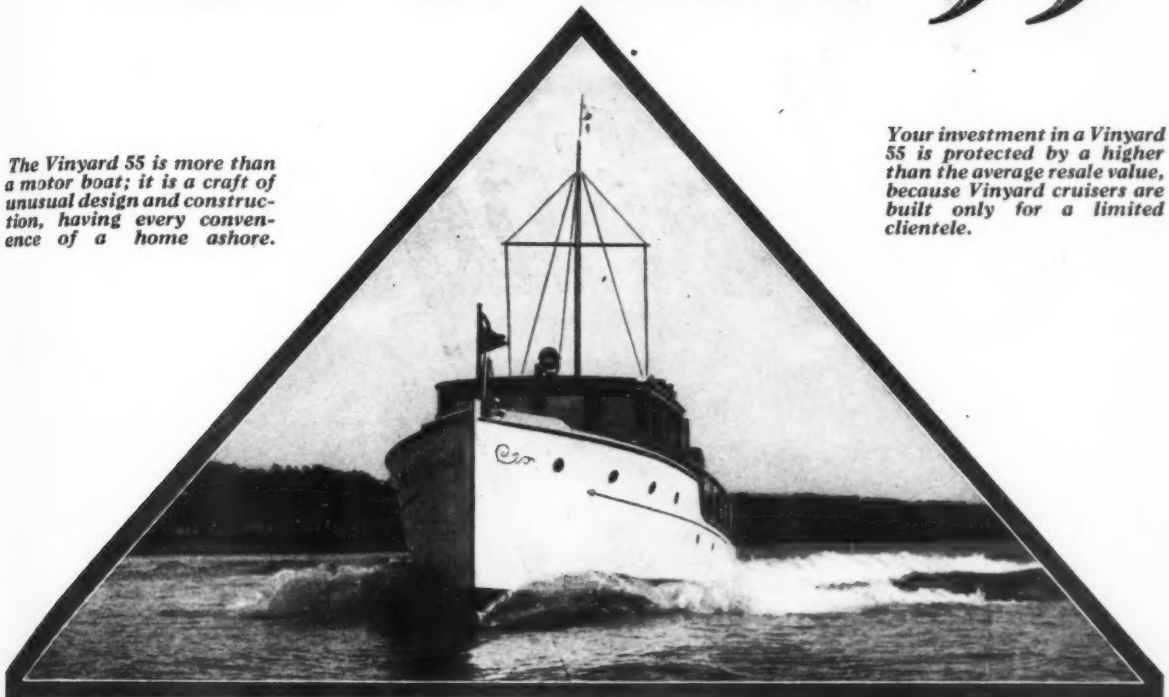


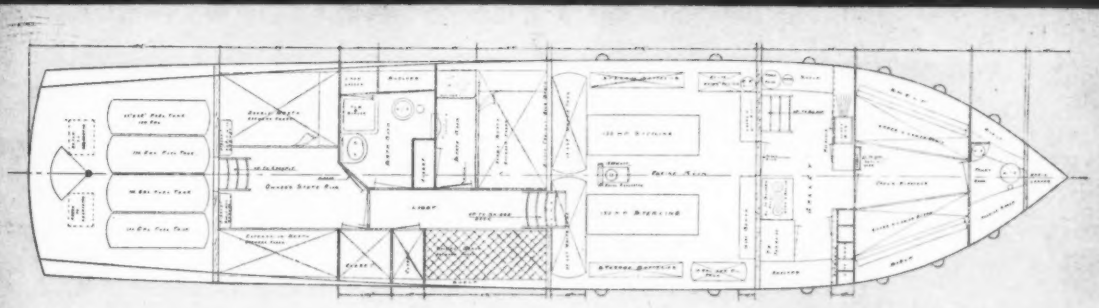
A 1930 diesel 80- footer for J. T. McMillan of Detroit. She was designed by Consolidated and is under construction at their yard

VINYARD 55

The Vinyard 55 is more than a motor boat; it is a craft of unusual design and construction, having every convenience of a home ashore.

Your investment in a Vinyard 55 is protected by a higher than the average resale value, because Vinyard cruisers are built only for a limited clientele.





The enclosed bridge deck is paneled inside and outside in natural finish mahogany. All windows, doors and ports are fitted with plate glass and screens. The floor is covered with velvet carpet. Note centralization of operating controls.

WOULD a saving of five to ten thousand dollars be too little for a day spent in Milford?

See for yourself that the VINYARD 55 offers most in safety, comfort, and adequate living quarters, with full privacy for both owner and guests. You would note the many superiorities of the VINYARD 55: its unusual design, ruggedness, fine craftsmanship, and modern conveniences. Frigidaire electric refrigerator, Delco lighting plant, Delco water pressure system, and Shipmate gas stove are standard equipment. Power is furnished by two Sterling 150 H. P. marine engines.

We have one VINYARD 55 now ready for immediate delivery.

Guests' room above sleeps two persons. It has private entrance to lavatory which is fitted with a shower bath. When double doors between the guests' and owner's compartments are opened, you have a room 19'7" long. The floors are covered with velvet carpet. Ports are draped with silk curtains.

Write today for illustrated literature

VINYARD SHIP BUILDING COMPANY

Designers and Builders of Yachts and Cruisers of the Highest Class

MILFORD DELAWARE

ELECTRIC

Starting for

EVINRUDE DIVISION
ELTO DIVISION
LOCKWOOD DIVISION
MILWAUKEE, WIS.

OUTBOARD MOTORS CORPORATION

OUTBOARD MOTORS

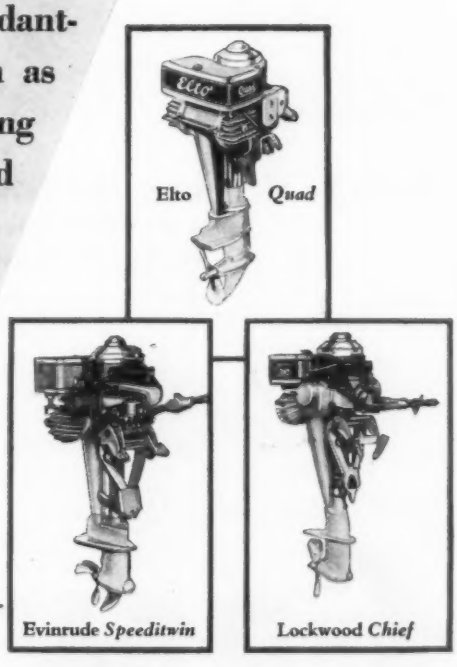
Advertising index will be found on 3rd last page

EVINRUDE *Elto* LOCKWOOD

NOW — you simply press a button. Instantly your motor whirls — ten times faster than strongest human hands could spin it. Starting is immediate, positive — precisely what you expect from finest motor cars. Current is generated abundantly. Stop and start as often as you wish; use electric lighting freely. So *today* the outboard motor is all that you have foreseen it—its final perfection achieved by those who created it.

▲ ▲ ▲

At the National Motor Boat Show, New York, January 17th to 25th, the following models will be displayed with this new Electric Starting, Lighting and Generating Equipment: The Evinrude Speeditwin, the Elto Quad and Senior Speedster, the Lockwood Chief.



CORPORATION Ole Evinrude ▾ President ▾

Boatmen, Get the Show—

The Marine World expects great things from Gray

and looks forward each year to the Gray announcement at show time. An announcement, by the way, that invariably brings revolutionary advancements—new models—new Gray accomplishments that set the pace in the marine field.
1930 is no exception! The Marine World has for weeks been asking: "What is Gray going to do?" Rumors have been abundant. Speculation has been general. Gray has something up its sleeve.
Gray has! And Gray proposes right now to give stock-boat builders and individual owners a hint of what is coming.

Gray will present a complete line of 20 Great Gray Units at the show. Motors from 5 to 200 H. P. Note the table on opposite page.
Gray will announce EIGHT NEW MODELS.
Gray will present 1930 motors with sweeping changes that mark a new day in the marine world.
Gray will announce TWIN EIGHTS—at no increase in cost per unit, a motor installation that in itself is worthy of a show.
And Gray will make an announcement on Auto-Craft, the greatest step forward in decades in the application of marine power through the Gray Vee Drive.

Expect great things from 1930 Gray. Gray has finished the greatest year in its history. You will find more boats at the show equipped with Gray than any other make of motor. In the years that Gray has been supplying motors to Stock boat builders, *it has not lost a single account.* This record is unique and cannot be claimed by any other engine manufacturer.
The entire marine world has paid a mighty tribute to Gray Leadership. Gray is not resting on its laurels. The 1930 Gray Line will more than fulfill the expectations of the great host of boaters who look to "Power Headquarters" for big things.

Gray Marine Motor Company
680 Canton Avenue
DETROIT, MICH.

Gray Marine Motor Co. of Canada, Limited
77 Adelaide St., W., Toronto, Canada

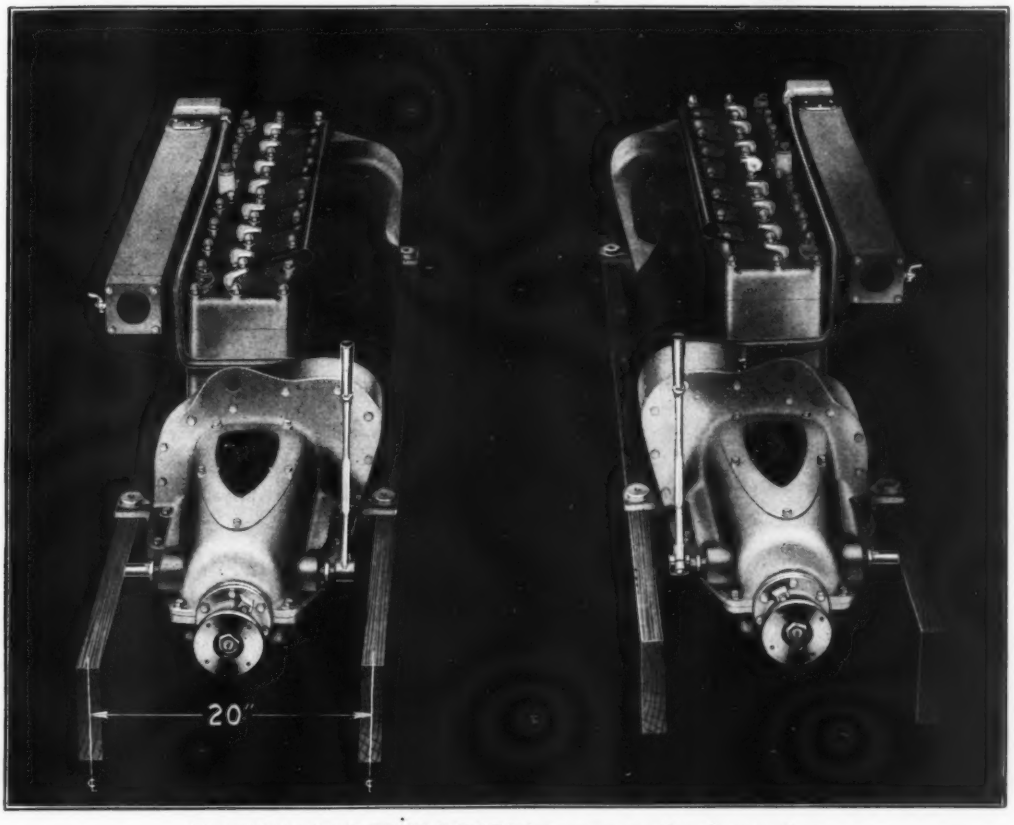
Twin GRAY "Eights" drive a 38' standardized Cruiser better than 25 mph. See it at the Show!

GRAY MOTORS

Built by Pioneers—Engineers—Leaders

Advertising index will be found on 3rd last page

the "Jump" on



THE NEW GRAY TWIN EIGHTS just as you see them in your boat

Gray Big Six (overhead valves) 5¼" Bore: 6" stroke *New!*	**Gray 8** Opposite Rotation Pairs	**Gray 8** Racing Type	**Gray 8** Runabout Type	**Gray 8** Cruiser Type	**Gray 6-90** overhead valves 3⅞" x 4½" *New!*	**Gray 6-72** 3⅜" x 4⅝"
Gray 6-70 High Speed Type *New!*	**Gray 6-60** 3⅜" x 4"	**Gray 6-50** High Speed Type *New!*	**Gray 6-40** 3 5/16" x 3 7/8"	**Gray 4-60** 4¼" x 5"	**Gray 4-51** 4⅛" x 4¼" *New!*	**Gray 4-44** 3⅞" x 4¼" *New!*
Gray 4-41 3⅜" x 4¼"	**Gray 4-30** 3⅜" x 4¼"	**Gray 37** 3⅜" x 4¼"	**Gray 17-27** 3⅜" x 4¼"	**Gray Model 25** *New!*	**Gray Model 25** without clutch and reverse gear *New!*	**The Gray Vee Drive** *New!*

GRAY MOTORS

Built by Pioneers—Engineers—Leaders

A 110-lb. tarpon being boated in the Gulf of Mexico by William Vogt, champion angler, aboard a Chris-Craft owned by John Shary

were striking in the Gulf, a challenge that his sporting blood could not ignore. Accompanied by E. H. McReynolds, assistant to the president of the Missouri Pacific, and a staff photographer, he entered a plane of the Missouri Pacific Railroad and was rapidly borne to the beach, where John Shary's 28-foot Chris-Craft awaited his coming. It was early morning when the party put out into the Gulf at slow trolling speed, in search of the game and wary tarpon.

The tarpon, as many old-time anglers will tell you, is one of the most difficult fish in the world to catch. It may run in size from 15 pounds to 100—or more, but invariably it has an extremely tough, or buckskin mouth, which makes the lodging of the hook extremely difficult, even after the fish has struck. He is generally trolled for, using a six-foot steel wire leader on a 42-pound test line with a 6-ounce split bamboo rod. The favorite bait is a strip of mullet belly, cut to roughly resemble a living fish, and trailed through the water some distance behind the boat, at a speed of four to six miles per hour. For this purpose, a motorboat of extreme flexibility and dependable action must be used; otherwise—no tarpon.

At 8:00 a. m., in the water of Brazo de San Diego Pass, just off Point Isabel, Mr. Vogt hooked his tarpon, and the fight was on—a grim affair of straining muscles and tackle strained to the breaking point; of frantic rushes, and almost impossible acrobatics on the part of the tarpon before he was finally reeled into the boat, and hoisted aboard by hands stiffened and blistered after a terrific battle that had lasted for forty minutes. No gaff was used by Mr. Vogt in landing his prize; indeed few gaffs would have stood the strain, for this king among fish weighed 110 pounds, and measured nearly six feet long, a huge size, even for this hefty fish. Mr. Vogt, who has wet a fishing line in most of the waters of the known world in his search for new fishing thrills, brands this day on the Gulf, in John Shary's Chris-Craft, as the greatest thrill of his career. And, after all, with a fine boat, a perfect day, good company, and game fish willing to strike—what greater joy could any man ask?

R. E. OLDS ORDERS NEW YACHT

A new 93x18-foot houseboat cruiser has been designed and is now being built by the New York Yacht Launch & Engine Company for R. E. Olds of the Reo Motor Car Company of Lansing, Michigan. This is the seventh yacht that this company has built for Mr. Olds in the past eighteen years. The hull is of exceptionally strong construction. The houses are of mahogany, and Mr. Olds has worked out an exceptionally fine layout consisting of five staterooms and two bathrooms.

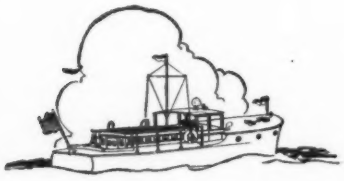
The new Matthews 46 de luxe double-cabin sport cruiser is a brilliant performer. A 150 h.p. Kermath as standard power delivers 17 to 18 m.p.h.

This yacht is twin screw and is being powered with two six-cylinder 6 by 10 Hill Diesel motors developing 150 h.p. each. The electric plant is a 12 k.w. Hill Diesel unit. This electric plant will be on exhibit at the coming Motor Boat Show of the Hill Diesel Engine Company where it should attract considerable attention as it fills a long felt want for a satisfactory diesel generator for use in a craft of this size.

The yacht is hot water heated using an American Radiator Company Arcola heater. J. H. Curtiss Company ejector type toilets are being installed. These toilets, by the way, have proved highly satisfactory to the owners of the 80-foot yacht Jean III, recently designed and built by the New York Yacht Launch & Engine Company.

(*Continued on page* 118)

You are cordially invited to visit us at the



MOTOR BOAT SHOW

A message from W. W. Wilcox, President of Wilcox, Crittenden & Co., Inc.

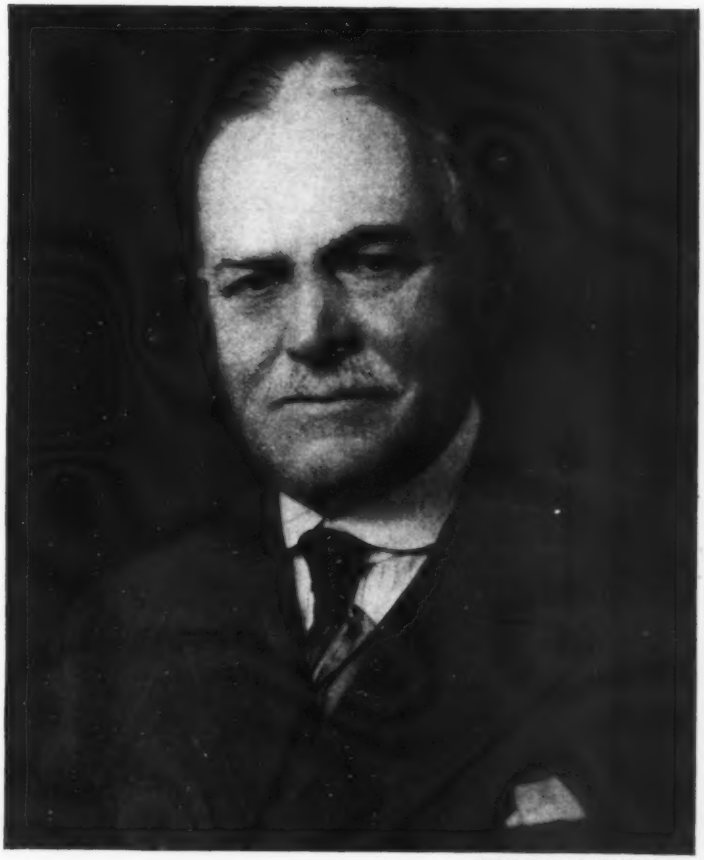


PHOTO BY BLANK-STOLLER, INC.

"The new year is ushering in many important changes and new developments in the marine field. The eyes of the boating world will be focussed on 1930 offerings at the Motor Boat Show in New York, January 17 to 25. There, appraisals will be made, plans laid for the coming season — a season which promises to be the most widely and thoroughly enjoyed boating year in the history of our country.

"To all those interested in boats, I extend a cordial invitation to visit our booth at the show. I assure you that it will be distinctly worth your while. You will want to see the new 1930 W-C fittings—items that have the modern touch and grace of line which harmonize with the craft of 1930 — Marine Hardware which is dependable and adaptable to all types. In addition, we have a surprise for you which will add materially to your enjoyment on the water during the entire season — and yet will cost you nothing. Be sure to visit our booth.

"And to all our friends with whom we have had contact, directly or indirectly, during the year of 1929, I take this opportunity to express our appreciation of their interest in and acceptance of the many new fittings designed and marketed during 1929, which I feel have added to the comfort and pleasure of all yachtsmen."

At the Show — Third Floor, Head of Main Stairway
Wilcox-Crittenden Dependable Marine Hardware
Factory:—4 So. Main Street, Middletown, Conn.
Established 1847

Sincerely,
W. W. Wilcox

Wilcox-Crittenden *Dependable* Marine Hardware

YACHT CLUBS ON CRUISING ROUTES

(*Continued from page* 18)

2. SAN PEDRO HARBOR

California Yacht Club of Los Angeles, Wilmington, California
Los Angeles Motor Boat Club, Wilmington
Los Angeles Yacht Club, Los Angeles Harbor, Wilmington
South Coast Yacht Club, San Pedro
Sophia Yacht Club, Avelon
Pacific Coast Yacht Club, Palos Verdes
Santa Barbara Yacht Club, Commercial Dock, Santa Barbara
Santa Barbara Power Boat Club, Santa Barbara

3. SAN FRANCISCO BAY

San Francisco Yacht Club, Sausalito, California
Pacific Motor Boat Club, Belvedere
Belvedere Yacht Club, Belvedere
Corinthian Yacht Club of S. F., Tiburon, Cal.
Sunset Yacht Club, San Francisco, Cal.
California Yacht Club, San Francisco, Cal.
St. Francis Yacht Club, San Francisco, Cal.
Aeolian Yacht Club, Alameda, Cal.
Encinal Yacht Club, Alameda
Oakland Yacht Club, Ft. of 19th St., Oakland
Oakland Yacht Club, East Oakland
Vallejo Yachting & Rowing Club, Vallejo, Mare Island Straits
Sequoia Yachting & Boating Club, Gunter's Island, Humbolt Bay
Humbolt Bay Motor Boat Club, Eureka
Motor Boat Club of Eureka, Eureka
Sacramento Boat Club, Sacramento
San Raphael Yacht Club, San Raphael
South Bay Yacht Club, Alviso

4. COLUMBIA (WILLAMETTE) RIVER

Coos Bay Motor Boat Club, North Bend, Oregon
Oregon Yacht Club, Portland
Portland Motor Boat Club, Portland
Portland Marine Club, Portland

5. PUGET SOUND

Bellingham Yacht Club, Ft. of Taylor Street, Bellingham, Washington
Fair Haven Yacht Club, Bellingham
Queen City Yacht Club, Seattle, Washington
Seattle Yacht Club, Seattle, Washington
Tacoma Yacht Club, Point Defiance Park, Tacoma, Wash.
Olympia Yacht Club, Olympia, Wash., Puget Inlet
Olympia Motor Boat Club, Olympia
Roche Harbor Yacht Club, Roche Harbor
Everett Motor Boat Club, Port Guardiari Bay, Everett
Everett Yacht Club, Everett

M. HUDSON RIVER (NEW YORK TO ALBANY)

New York Yacht Club, Ft. of West 86th Street, New York City
Columbia Yacht Club, Ft. of West 86th Street
Hudson River Yacht Club, Ft. of West 92nd Street
North Hudson Yacht Club, Edgewater, New Jersey
North River Yacht Club, Edgewater
Edgewater Motor Boat Club, Edgewater
Undercliff Motor Boat Club, River Road, Edgewater
Englewood Basin Yacht Club, Englewood
New York Motor Boat Club, Ft. of West 147th Street, New York, N. Y.
Federal Motor Boat Club of New York, Ft. of West 141st Street
Cobweb Yacht Club, Ft. of West 153rd Street
Colonial Yacht Club, Ft. of West 153rd Street
Fort Washington Yacht Club, Ft. of West 169th Street
Manhattan Island Yacht Club, Ft of West 172nd Street
Loyal Motor Boat Club, 210th Street & 9th Avenue, N. Y. C.
Yonkers Yacht Club, Glenwood, Yonkers, N. Y.
Hudson Boat Club, Ludlow-on-Hudson, Yonkers, N. Y.
Yonkers Corinthian Yacht Club, Yonkers
Germania Boat Club of Yonkers, Yonkers
Glenwood Boat Club, Yonkers
Yonkers Boat Club, Yonkers
West Hudson Yacht Club, Kearney, N. J.
Tarrytown Yacht Club, Tarrytown, New York
Ridgefield Park Boat Club, Ridgefield Park, N. J.
Catskill Yacht Club, Catskill Creek, Catskill, N. Y.
Palisade Boat Club, Greystone, N. Y.
Philipse Manor Club, Philipse Manor, N. Y.
Tappan Zee Yacht Club, Grand-View-on-Hudson, N. Y.
Tower Ridge Yacht Club, Hastings-on-Hudson
Nyack Boat Club, Nyack, New York
Shattemuc Yacht & Canoe Club, Ossining, N. Y.
Highland Boat Club, Peekskill, N. Y.
Peekskill Motor Boat Club, Peekskill, N. Y.
Newburgh Yacht Club, Ft. of North Street, Newburgh, N. Y.
Chelsea Yacht Club, Chelsea, N. Y.
Poughkeepsie Yacht Club, Ft. of Union St., Poughkeepsie, N. Y.
Rondout Yacht Club, Kingston Point, N. Y.
Kingston Yacht Club, Kingston, N. Y.
Albany Yacht Club, Albany
Empire Yacht Club, Island Creek, Albany
Troy Motor Boat & Canoe Club, Troy, N. Y.
Schenectady Boat Club, Scotia, N. Y.
Schenectady Country Club, Schenectady
Mohawk Power Boat Club, Schenectady
Schenectady Yacht Club, Schenectady

N. ST. LAWRENCE RIVER (NORTH AND SOUTH SHORES)

1. SOUTH SHORE

Clayton Yacht Club, Clayton, N. Y.
Oswegatchie Yacht Club, Ogdensburg, N. Y.
Oak Island Yacht Club, St. Lawrence County
St. Lawrence River Yacht Club, Alexandria Bay
Thousand Islands Yacht Club, Alexandria Bay
Chippewa Yacht Club, Chippewa Bay
Chimney Island Boat Club, Odgensburg

2. NORTH SHORE

St. Johns Yacht Club, St. Johns River, Quebec, Canada
Iroquois Yacht Club, Lachine, P. Q.
Quebec Yacht Club, Louise Basin, Quebec
Royal St. Lawrence Yacht Club, Dorval, P. Q.
Gananoque Yacht Club, Gananoque, Ontario

P. GREAT LAKES

1. ONTARIO

a. NEW YORK SHORE

Dexter Power Boat Club, Dexter, N. Y.
Genesee Aquatic Club, Genesee River, Rochester, N. Y.
Rochester Yacht Club, Summersville
Rochester Yacht Club, Port of Rochester, Lake Ontario
Pathfinder Yacht Club, Fulton
Crescent Yacht Club of Watertown

(*Continued on page* 68)

POSITIVELY PREVENTS AND CONQUERS FIRE

THE best boat in the world, plus the finest equipment, is a helpless prey to Fire unless it has readily accessible, quick acting, Fire extinguishing apparatus.

And the best boat in the world, plus ordinary fire prevention equipment, may become a roaring furnace or an exploded mass of wreckage unless the fire can be checked within a few seconds.

Today C-O-Two (the original and the First Automatic Fire Extinguisher employing the use of C-O-Two gas) offers absolute, almost instantaneous death to fire. C-O-Two is stored under great pressure in small steel cylinders. The cylinder or cylinders are permanently installed in your boat and connected by piping to all danger points. When fire occurs C-O-Two gas is released and almost instantly smothers the fire. In the C-O-Two Automatic System, which also may be operated manually, C-O-Two is released by a rise in temperature. In the C-O-Two Manual System a slight pressure on the remote control knob instantly releases the harmless C-O-Two gas.

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At the conclusion of the greatest year in its history and at the beginning of this new year, C-O-Two offers to boat owners and boat builders New Models at attractive prices. The C-O-Two System is available for the smallest runabout or the largest yacht. A booklet and price list describing the simplicity of the C-O-Two System will be sent on request. Address the factory or the eastern branch.

PLEASE BE CERTAIN—

C-O-Two is a registered trade name of this company and is applied to both the Automatic and Manual systems, controlling the release and discharge of carbon dioxide gas for fire protection. It should not be confused with any system using carbon dioxide gas as a fire extinguishing agent.

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Eastern Factory Branch
E. J. WILLIS CO.
85 Chambers Street
New York City

YACHT CLUBS ON CRUISING ROUTES

(*Continued from page 66*)

Cape Vincent Yacht Club, Cape Vincent
Olcott Yacht Club, Lake Ontario, Olcott
Oswego Yacht Club, New Harbor, Oswego, Lake Ontario
Brockport Yacht Club, Hamlin, Lake Ontario
Crescent Yacht Club, Chaumont Bay, Lake Ontario, Chaumont

b. CANADIAN SHORE

Toronto Motor Boat Club, Toronto, Canada
National Yacht & Skiff Club, Toronto, Ontario
Alexandria Yacht Club, Ward's Island, Toronto Bay, Lake Ontario
Queen City Yacht Club, Sunfish Island, Toronto, Lake Ontario
Royal Canadian Yacht Club, Center Island
Royal Hamilton Yacht Club, Hamilton, Burlington Bay
Royal Canadian Yacht Club, Hamilton
Victoria Yacht Club, Hamilton
Oakville Club, Oakville Harbor, Lake Ontario
St. Catherine Motor Boat Club, St. Catherine, Ontario
Trenton Yacht Club, Trenton, Ontario
Kingston Yacht Club, Kingston, Ont.

2. LAKE ERIE (NIAGARA RIVER & BUFFALO TO DETROIT RIVER)

Buffalo Launch Club, Grand Island, Niagara River, N. Y.
Niagara Boat Club, Grand Island, Niagara River
Buffalo Yacht Club, Buffalo
Twin City Boat Club, Tonawanda
Sherman Yacht Club, Magnolia Springs, Chautauqua
Motor Boat Club of Silver Creek, Silver Creek
Erie Yacht Club, Lahkwa Park, Erie, Pa.
Cleveland Boat Club, Ft. of East 9th St., Cleveland, Ohio
Cleveland Yachting Club, Rocky River
Edgewater Yacht Club, Edgewater Park, Lake Erie, Cleveland
Gordon Park Motor Boat Club, Cleveland
Lakewood Boat Club, Rock River Bridge, Lakewood
Lorain Power Boat Club, Lorain, Ohio
Vermillion Boat Club, Vermillion
Sandusky Yacht Club, Sandusky
Port Clinton Yacht Club, Port Clinton
Put-in-Bay Yacht Club, Put-in-Bay, South Bass Island
Ottawa River Yacht Club, Toledo
Toledo Power Boat Club, Bay View Park, Toledo
Toledo Yacht Club, Bay View Park, Maumee River, Toledo
Riverside Boat Club, Toledo, Maumee River
Bayview Yacht Club, Toledo
Maumee River Yacht Club, Toledo
Monroe Yacht Club, Monroe Piers, Monroe, Michigan
Detroit Boat Club, Belle Isle, Detroit River
Detroit Boat Club Yachtsmen, Belle Isle, Detroit River
Detroit Yacht Club, Belle Isle, Detroit River
Edison Boat Club, Detroit, Detroit River

3. LAKE ST. CLAIR

Country Club of Detroit, Grosse Pointe, Michigan
Bayview Yacht Club, Detroit
Solvay Boat Club, Detroit
Grosse Pointe Yacht Club, Grosse Pointe
West Detroit Boat Club, West Jefferson Avenue, Detroit
Del Ray Motor Boat Club, West Detroit
Old Club, St. Clair Flats
Bob White Power Boat Club, Hamburg
Port Huron Yacht Club, St. Clair River, Port Huron

4. LAKE HURON

Saginaw Boat Club, Saginaw, Michigan
Bay City Yacht Club, Essexville, Saginaw Bay
Bay City Boat Club, Bay City, Michigan
Indian River Boat Club, Cheboygan

5. LAKE MICHIGAN

Charlevoix Boat Club, Charlevoix, Michigan
Northport Point Yacht Club, Northport, Grand Traverse Bay
New-We-Quo-Tong Club, Traverse City
Ludington Yacht Club, Ludington
Whitehall Yacht Club, Whitehall
Crystal Lake Boat Club, Frankfort
Grand Rapids Motor Boat Club, Grand Rapids
Grand Rapids Boat & Canoe Club, North Park, Grand Rapids
Macatawa Bay Yacht Club, Macatawa
Menominee Yacht Club, Menominee
Muskegon Country Club Yachtsmen, Muskegon
Petoskey Motor Boat Club, Petoskey
Spring Lake Yacht Club, Grand Haven
South Shore Yacht Club, Milwaukee, Wisconsin
Milwaukee Yacht Club, Milwaukee
Racine Power Boat Club, Racine
Sheriden Shore Yacht Club, Wilmette Harbor Entrance
Appleton Boat Club, Ft. of North Street, Appleton
Fond du Lac Yacht Club, Fond du Lac
Green Bay Yacht Club, Green Bay
Kenosha Yacht Club, Kenosha
Neenah Nodaway Yacht Club, Neenah
Oshkosh Yacht Club, Oshkosh
Watertown Motor Boat Club, Watertown
Buccaneers Club, Gross Point Harbor, Wilmette, Ill.
Columbia Yacht Club, Chicago.
South Shore Power Boat Club, Chicago, Illinois
Jackson Park Yacht Club, Jackson Park, Chicago
Chicago Motor Boat Club, Lincoln Park, Chicago, Illinois
Chicago Yacht Clubfi Chicago.
Columbia Yacht Club, East End, Chicago, Illinois
Lincoln Park Yacht Club, North Harbor, Lincoln Park, Chicago
Lincoln Power Boat Club, Park Harbor, Chicago
New Illinois Athletic Club, Chicago
Blue Island Power Boat Club, Blue Island, Illinois
Evanston Yacht Club, Evanston

6. LAKE SUPERIOR

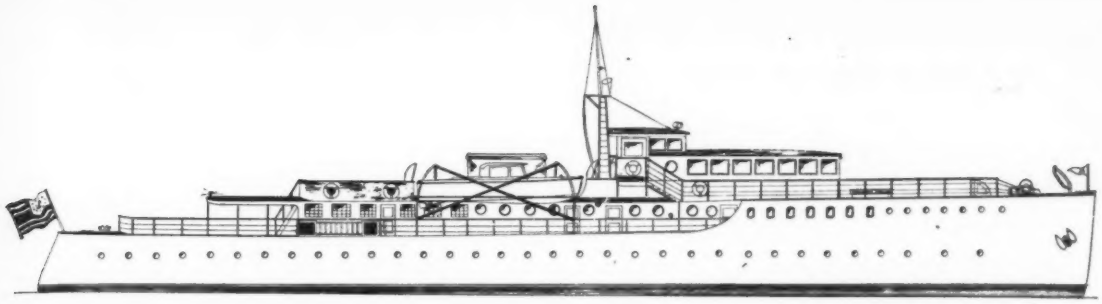
Onigaming Yacht Club, Houghton, Michigan
Portage Motor Boat Club, Houghton
Superior Boat Club, Superior, Wisconsin
Duluth Boat Club, Minnesota Point, Duluth, Minnesota

Q. FINGER LAKES REGION

Seneca Yacht Club, Seneca Lake, Geneva, New York
Geneva Yacht Club, Geneva
Seneca Falls Yacht Club, Seneca Falls
Ithaca Motor Boat Club, Cayuga Lake, Ithaca
Lakeside Yacht Club, Ithaca
Motor Boat Club of Ithaca, Ithaca
Cayuga Lake Yacht Club, Kidders, N. Y.
Syracuse Yacht & Country Club, Oneida Lake, Clay
Utica Motor Boat Club, Utica

R. LAKE CHAMPLAIN

Lake Champlain Yacht Club, Burlington, Vermont
Missisquoi Yacht Club, Swanton, Vt.
Westport Yacht Club, Westport, N. Y.
St. Johns Yacht Club. St. Johns, P. Q., Can.

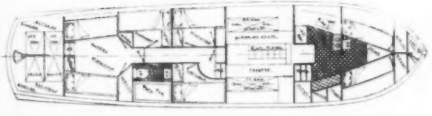


HUMPHREYS SEA-CRUISERS
Diesel Powered

NOT only is the ingenious design of the Humphreys 140-foot Diesel cruiser illustrated above refreshing to the discriminating yachtsman, but powered with twin 800 H.P. Diesel engines it is capable of a maximum speed of 26 miles per hour at an operating cost that is surprisingly low for such a high speed. Interior arrangement of this beautiful craft is optional with purchaser.

Recent advancements in Diesel engineering coupled with Humphreys developments in Diesel construction has brought about a wide selection of high speed, standardized Diesel cruisers, ranging from 40 to 75 feet with speeds of 18 to 20 miles an hour at a reasonable initial cost and an operating cost which is lower than any other kind of power—and much safer.

The Humphreys
50-CHALLENGER



The Humphreys 50-Challenger provides many unusual features—in roominess of accommodations, in seaworthiness, in completeness of equipment and furnishings, include: A roomy forecastle forward, large galley running the full width of the ship. Enclosed deck house, finished with sofa berths, so arranged that the helmsman can be either completely shut off or not, as the owner wishes. Deck house connects directly with the owner's and guests' quarters—three single staterooms, each with bureau and closet; and a large, double stateroom with bathroom and built-in tub. Cruising speed of 14-15 m.p.h. with Diesel power. See the 50-Challenger at the Motor Boat Show, Grand Central Palace, New York, January 17th to 25th.

Prices, Specifications and Equipment List of all Humphreys Sea-Cruisers — from 40 to 75 feet—mailed promptly on request

DESIGNED AND SOLD BY

FREDERIC P. HUMPHREYS INC.

230 Park Avenue — New York City

Cable Address: HUMPFRED

Built by

THE HUMPHREYS SHIPBUILDING CORPORATION, KEYPORT, N. J.

NAVAL ARCHITECTS AND YACHT BROKERS

WILLIAM ATKIN
NAVAL ARCHITECT
THE MIZZEN TOP, HUNTINGTON, N. Y.
Send 50 cents for illustrated list of stock plans

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If you have a boat in Florida waters that you want sold, insured, surveyed, or cared for in any way; or if you wish to purchase one; I can serve you. Over fifteen years' experience as a Naval Architect, Shipbuilder and Inspector. My list of all classes of boats for sale and charter is very extensive.
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Yacht and Motor Boat Brokerage
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Sail and power yachts. Houseboats and commercial vessels. Surveys made in all Gulf Ports.
I have a large number of yachts of every description for sale, and some for charter. Stability and free board calculations. Cable address: "Walkeen."

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Let Us Repeat

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Special rates and circulation data on request

The Main Sheet

5-216 General Motors Building Detroit
W. D. EDENBURN, Editor

AMERICA AND EUROPE

(*Continued from page* 16)

Finally I would ask everybody concerned to refrain from claiming WORLD records unless so recognized by the International Union. Especially where outboards are concerned, the situation is delicate. American outboard motors and American outboard hulls are spread all over the world, and some of the European speeds in classes B, C, D are very near the speeds attained in America. Furthermore, the European outboard motors are improving a great deal and we may expect that sooner or later some European outboard will establish a new world record, in which case we might expect a conflict between interested manufacturers. And vice versa.

Another reason why the Union will only consider speed records of one kind is the following: No one can remember the different national records, no more than one can remember the hundred and one records for aeroplanes and motor cars. But everyone remembers the maximum speed attained by Major Segrave with his motor car on Daytona Beach and the maximum speed attained by the Schneider Trophy seaplanes. Similarly everyone remembers the maximum speed attained by Gar Wood, but no one, except the interested parties, knows by heart all the national records. National records are useful and necessary, but can never have more than local interest. The criterion of speed is the world record.

In a following article I will deal with the outboard motor, as seen from an international point of view.

SEGRAVE TO RACE AT DETROIT NEXT FALL

Major Sir Henry O. D. Segrave, conquerer of Commodore Gar Wood's Miss America VII, at Miami Beach and Lido, Italy, and holder of the world's automobile speed record of 231.362 miles per hour, will be a participant in Detroit's 14th annual international regatta. Major Segrave will come to Detroit next fall for the regatta, August 29 to September 2, to participate in a new international class and will bring two boats for the affair. Secretary J. Lee Barrett, of the Yachtmen's Association of America, who has just returned from Europe, reports that he will also bring a boat to compete for the British International Trophy, but to date the famous English speed merchant has not committed himself by officially challenging for the world's championship speed boat trophy.

Whether Major Segrave formally challenges for the British International Trophy or not, Detroit is to have the 15th running of this famous trophy, given in 1902 by the late Lord Northcliffe, as Miss Marion Barbara Carstairs, who raced against Commodore Gar Wood and James Talbot, Jr., of Los Angeles, in 1928 and '29 is building one or two boats in England for the British International Trophy. Should Major Segrave also enter, it will be the first time since the Harmsworth Trophy came back to the United States in 1920 that a full English team with three boats has competed against the United States team.

Secretary Barrett also states that Italy expects to be represented by a boat in the world's championship race next fall as Prince Ruspoli promised him in Rome that the boat which he was building to race at Lido last fall would be ready to come to the United States.

The new international class, for which Major Segrave has promised two boats and for which he expects to furnish from six to eight hydroplanes from England, will be run for an international trophy and will have entries from England, Canada and the United States.

Commodore Harry B. Greening of Hamilton, Ontario, is going to build for the class and expects to have two more boats from the Dominion. There are prospects of a dozen or more boats from this country representing chiefly Boston, Chicago, Port Washington, Long Island and Detroit. The class is for boats of twenty feet or more in length, but without any other hull restrictions, powered with marine engines of not more than 135 rated horse power.

This class was originally planned for the Miami Beach Regatta next March, and recently Major Segrave advised the Detroit Gold Cup Committee that he would be pleased to furnish two boats himself and several other English boats if Detroit would schedule a race for the class. An important international trophy now held in trust by the American Power Boat Association, will be put up for this event.

This will be the first time since 1921 that Detroit will run more than three days of competitive racing in its Regatta, having scheduled four days of competition beginning on Friday, August 29, and finishing with Labor Day, September 1, and following this with a day of trials or straight-away racing. There will be a number of class races covering a wide range from outboards to express cruisers, making the program one to which almost every type and class of boat will be eligible.

Advertising index will be found on 3rd last page

A Different Sport for Every Day of the Week!

BATHING—BOATING—FISHING—GOLF
TENNIS—POLO—MOTORING

It's Summer Now at MIAMI BEACH

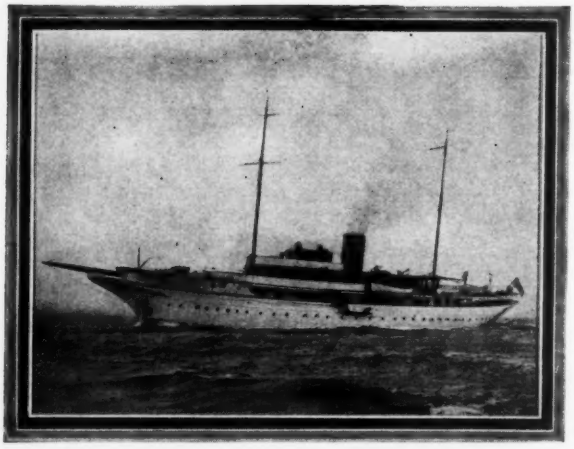
YOU can follow your favorite summer-time sport throughout the winter at Miami Beach. Here in the American-tropics it is now as pleasant and cheerful as northern June.

Come to Miami Beach now while the season's activities are in full swing. Brilliant social functions and gala events of every sort hold sway from January to April. For hotel accommodations address:

THE CARL G. FISHER HOTELS
Flamingo—Nautilus—Lincoln—King Cole—Boulevard
MIAMI BEACH, FLORIDA

The Great Southern Regatta combined with the International Races on Biscayne Bay, Miami Beach, March 25 and 26th. Among the important events is the contest for the Miami Beach Trophy, representative of the International Free-for-All Championship. Be sure to see these races.

NOTEWORTHY YACHTS - How They *are* Protected *from* Fire



MANY of the world's largest yachts are protected against fire by the LUX System. Aside from the need of guarding the lives of those on board, the large investment represented by these yachts calls for the greatest measure of fire protection.

LUX protection means the same thing on a large yacht as on a small one. A pull on the LUX Control Handle, and fire—no matter how terrific—is out in 10 seconds.

The LUX installation on the Hi-Esmaro protects the engine room, galley and paint locker. It consists of cylinders containing the LUX gas, piping with outlets in the protected spaces and controls located safely away from the fire area.

A few of the other large yachts protected by LUX are:

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Walter Kidde & Company, Inc.
140 Cedar Street
New York

LUX

Fire Extinguishing System

LABELED BY UNDERWRITERS' LABORATORIES

THE CHANNEL ISLANDS OF SOUTHERN CALIFORNIA

(*Continued from page 26*)

Off to the north was the long sandspit against which the incoming swells broke with a magnificent disdain piling their foamy crests high into the air, to be caught by the whistling wind and blown far to sea as a fine spray. It was a ceaseless battle of tireless elements—we being civilized wondered how many millions of horsepower were going to waste along that shore.

As evening came on we watched the weirdly festooned sand dunes become blue, purple and amethyst. The island, outlined against the orange and gold sunset, wore a halo of ever changing color; then without warning it was night. The rigging whistled louder, if possible; the roll of the boat was wearing. From a nearby fisherman we learned it had been blowing steadily for 18 days. An extra heavy gust shook us. Through a window we saw the light of the fishing boat go by. We were dragging again. This time we pushed deep into the kelp (it was a little quieter) and lowered the anchor carefully until we felt it bite. The bottom was pebbly. For an hour we watched; we were holding but that ¾ inch rope was taut as a fiddle string; we expected it to break at any moment.

It was anything but satisfying to read in Claude Worth's book how lacking we were in ground tackle. Lord, we had ample proof of that, and then and there I vowed my first purchase on shore would be another and a larger anchor and chain, lots of it, miles of it! At last we went to sleep, thankful that the wind was offshore. I really don't know how hard it was blowing. To me it was hard enough, but I suppose about thirty-five miles an hour. The chief officer on the Coast Guard boat thought forty.

About 1:00 a.m., bumping of the dinghy alongside my berth roused me. I hastened to the companionway. Far to the west were the riding lights of our friends—we were going to sea, anchor and all; I swore a little, roused Moby Dick and proceeded to get that anchor aboard and set the head-sail. We lay-to comfortably, the island protected us from any heavy sea, and discussed the situation, finally deciding to run for Santa Cruz, ninety miles northwest. For two hours we bucked those steep wet seas. Then the dinghy swamped. So we found a comparatively smooth spot, put about and ran back, this time far, far into the kelp, dropped anchor and of a sudden the wind stopped blowing. We were wet, the wind had whipped spray over the entire boat and half way up the mast, the boat had stood up to it splendidly. Running back a sickly moon looked out from the clouds once or twice and we were amazed to find a small dolphin jumping joyously back and forth around the dingfiy as if a long lost friend were returning.

We slept soundly—next time the anchor dragged, let her go—we could only hit Mexico some two hundred miles away. But we were in the same spot when we awoke.

It took an hour to straighten out the mess in the cabin. Luckily everything was bone dry—it was merely confusion. After breakfast we were laying our plans—suddenly Freddie laughed—we all laughed—dragging again. This time we let her go—who cared—we would run back to Santa Barbara and then to Santa Cruz. So we set out. It was a glorious sail through a restless sea of long high swells, flying spray, up a watery hill, sliding down to a lull, then up again. We were wet, but we laughed and drove Gwemmy for all she was worth. We sailed twenty-eight miles in three hours and forty minutes. Once in the little bight of Santa Barbara we sat down to baked ham and mashed potatoes, topped off with a cherry pie, all cooked during that lively sail—and I'm the cook!

We were off early the next morning. Through a little error (forgetting to allow for compass deviation) Moby Dick landed us at the east end of Anacapa. He was quite chagrined but it gave us a splendid opportunity to see the long hogsback at close range. It is bleak, steep, and altogether quite a useless place. A few lobsterers live on the north side. We crossed Anacapa passage under power, and after a wet four miles found a quiet anchorage under a cliff at the south end of Smugglers Cove.

One can become ecstatic over Santa Cruz. It would take a combination of Liszt, Schubert and Chopin to catch the spirit which pervades the place; it would take a Moran and Millet to put it on canvas; and after they finished one would still feel the futility of their efforts. The shore is an ever-changing panorama, high cliffs of solid stone, tranquil coves—emerald green—cobalt blue—silvery white beaches, and farther back massed fields of liveoak brilliant green against the somber dun of wild barley. Far up on a sunny southern slope there is an olive orchard, its regularity standing in strange contrast to the disorder of Nature. Yonder a herd of grazing cattle add a further touch already surfeited with contentment.

We made a hasty trip to the city of Santa Barbara so that

(*Continued on page 76*)

Advertising index will be found on 3rd last page

Chris-Craft Adopts the Oberdorfer Automatic Electric Bilge Pump on all their Cruisers!

38-foot Chris-Craft Commuting Cruiser with Oberdorfer Automatic Electric Bilge Pump as standard equipment.

Patents Applied For
Oberdorfer Master Automatic Electric Bilge Pump In 6, 12 and 32 volt units

NO boat is absolutely free from danger when left alone for any length of time in the water. The finer the boat the more important becomes the necessity of protecting it against damage from bilge water accumulation.

The builders of the world famous *Chris-Craft* are providing OBERDORFER AUTOMATIC ELECTRIC BILGE PUMPS as standard equipment on all their cruisers so that *Chris-Craft* owners may have complete freedom from the annoyance and worry of bilge water troubles.

Every motor should be equipped with one or more of these powerful, compact, complete automatic pumping outfits. They provide cheap insurance against possible damage to your boat. Easily installed. Low current consumption. Constant or automatic action as desired from remote control. Made of non-corrosive metals.

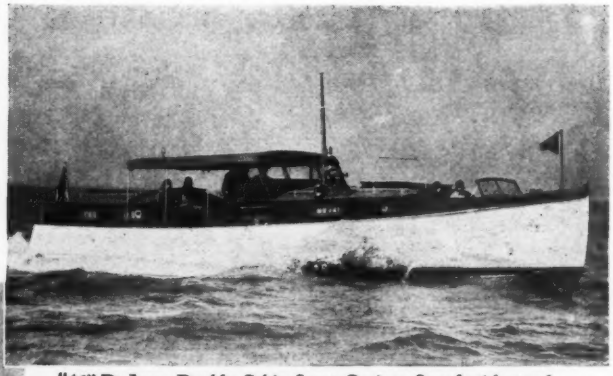
Send for complete information about Oberdorfer Bilge Pumps, Bronze Gear Circulating Pumps, Motor Driven Gear and Centrifugal Pumps, and the Oberdorfer Backfire Trap.

M. L. OBERDORFER BRASS CO.
2200 THOMPSON ROAD SYRACUSE, N. Y.

Patents Applied For
Oberdorfer Improved Model "B" Automatic Electric Bilge Pump In 6 and 12 volt units Recommended for small boats

Oberdorfer Pumps

Never Before such Impressive Values



"46" De Luxe Double Cabin Sport Cruiser. Speed with standard power, 18 m. p. h. Price afloat Port Clinton, $15,500.

"38" De Luxe Double Cabin Sport Cruiser. Speed with standard power 18 m. p. h. Price afloat Port Clinton, $11,000.

. . . Compare
Matthews *Quality and Values at the New York Motor Boat Show*
. . . . . January 17th to 25th

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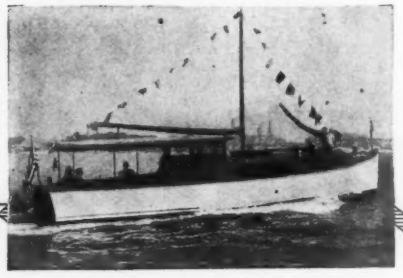
Belle Isle Boat & Engine Co., 8777 E. Jefferson Ave., Detroit; Boardman & Flower, 1740 Van Ness Ave., San Francisco; Bruns, Kimball & Co., cor. 5th Ave., & 15th St., New York City; Florida Branch, 17 McAllister Arcade, Miami; Lake Erie Yacht Brokerage Corp., 1365 W. 117th St., Cleveland; Wm. V. Masson, 421 Munsey Bldg., Baltimore; Mississippi Valley Yacht Sales, Times Bldg., Alton, Ill.; Walter H. Moreton Corp., 1045 Commonwealth Ave., Boston; J. A. Scarlett, 436 East 2nd St., Cincinnati; R. Sealy, Commerce Bldg., Galveston; Robert V. Staats, Inc., 675 So. Park View, Los Angeles.

The open bridge deck Matthews Day Cruiser is powered to provide a standard 16 m. p. h. Price afloat Port Clinton, $7,900.

The Matthews "46" in the Double Cabin Open Bridge deck stock model is standard powered to give 18 m. p. h. Price afloat Port Clinton, $13,500.

The Matthews "38" Single Cabin Stock Cruiser with standard power has a speed of 17 m. p. h. Price afloat Port Clinton, $6,850.



Advertising index will be found on 3rd last page

in Boating History have Been Offered by Matthews

. . . and never before have yachtsmen been provided such a wide choice of real seagoing Matthews Models . . .

Complete justification for your choice of a Matthews stock cruiser will be quickly revealed to you upon intimate association or actual use. Thirty-nine years of experience in building cruisers and the integrity of a company with such a record for business permanence is your definite guarantee of outstanding cruiser satisfaction – stout design – real cruising ability and the staunchness that makes every Matthews stock model equally at home in any kind of weather along the Atlantic Coast – the Great Lakes – or on the Pacific. Ten individualized models within the 38 and 46 foot sizes . . . Single and double cabin arrangements . . . Open and enclosed bridge deck models . . . Speeds from 15 to better than 30 miles per hour . . . Twenty-four attractive cabin arrangements . . . With inbuilt values that defy comparison. There are hundreds of tangible superiorities of design offered the wise owner in a 1930 Matthews stock cruiser.

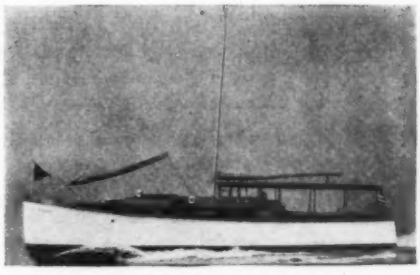
Write for the illustrated folders on the complete series—or the model illustrated that serves your own ideas of price, speed and cruiser comfort.

THE MATTHEWS COMPANY

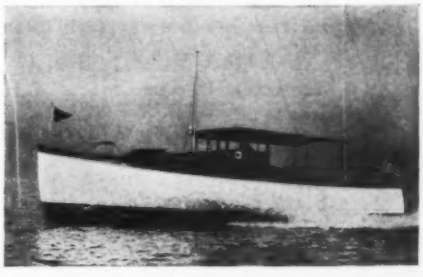
DESIGNERS AND BUILDERS OF BOATS OF DISTINCTION SINCE 1890

PORT CLINTON, OHIO

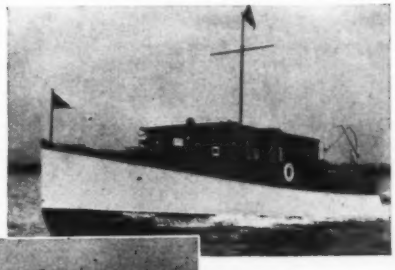
Florida Branch: 17 McAllister Arcade, Miami



The Matthews "46" Single Cabin model has a speed of 17 m. p. h. with Standard power. Price afloat Port Clinton, $12,200.

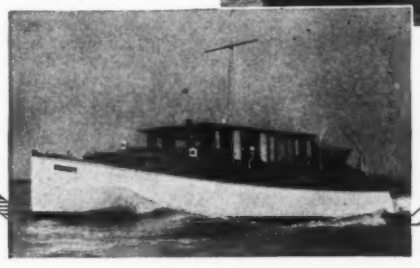


The 38 foot Matthews Sport Cruiser is a single cabin 19 m. p. h. boat adapted to deep sea fishing. Price afloat Port Clinton, $7,550.



The "38" Double Cabin enclosed bridge deck model has standard speed of 15 m. p. h. Price afloat Port Clinton, $9,400.

Matthews has achieved marked advances in speed and staunchness. The 46 foot Sport Cruiser bears this out with its 18 m. p. h. performance. Price afloat Port Clinton, $12,800.



The Double Cabin "46" stock model with enclosed bridge has a standard speed of 17 m. p. h. Price afloat Pt. Clinton, $14,500.

Is your magneto a good sailor?

WE ASK the question in all earnestness. Because it *is* serious if water or dampness puts a magneto out of business, when you are out for a holiday on the good old boat.

Our advice is sound, even though it's selfish. Be sure you start out with the one magneto that is proof against water and dampness. The magneto designed so that water simply cannot penetrate its interior mechanism. The magneto that will keep on feeding the same Super-Energy spark even if you were accidently to play a hose on it. The magneto that eliminates the need for old fashioned protective covers.

It is the Robert Bosch Super-Energy Magneto. Here are a few of its advances in design:

Waterproof construction . . . more energy than any other magneto of equal size . . . a distributor plate which is fitted tight to the magneto frame so that water cannot enter . . . a rugged one-piece frame, etc., etc.

It's a good sailor, this Robert Bosch Super-Energy Magneto . . . a mighty good sailor. Write for full information and free booklet: "Ignition Briefly described".

ROBERT BOSCH MAGNETO CO., Inc.
3603C Queens Blvd., Long Island City, N. Y.

All Robert Bosch Super-Energy Magnetos bear the full name "Robert Bosch" and this trademark: . . . . .

Robert Bosch
Super-Energy
Magneto

THE CHANNEL ISLANDS OF SOUTHERN CALIFORNIA

(*Continued from page 72*)

B. F. might get home in time to celebrate the birthday of a grandchild. We parted with real regret, especially Freddie who looked ruefully at the dish mop. A new breakwater and a new yacht club made our twenty-four hour stay a happy remembrance.

One of the most perfect anchorages ever seen was ours the next night. We had sailed to the west end of Santa Cruz. There in a little gullied-out opening in the rocks was a cove, land locked except on the north where Gwemmy came to rest in two fathoms of water clear as crystal and quiet as glass. On shore were many liveoaks and a spring of wonderfully cool sweet water. The island abounds in just such spots.

Here we met near disaster. Moby Dick was climbing one of the steep hills, slipped in a patch of the treacherous barley and slid down to a shale bed. Below him, a hundred and fifty feet sheer, were the cruel jagged rocks. It was impossible to climb. At last a rope was carried up and he came back to us. It is the kind of incident of which little is said. We went on with the daily routine patiently ignoring the affair. Late that evening Freddie piped up, "Say, Moby Dick, if you'd of just yodeled a couple of times I'd have thought you were a Swiss mountain climber." The boy dodged just in time to miss a flying Bowditch. Everyone laughed and the incident was closed.

There was a brisk west wind blowing and an ocean of whitecaps when we put out the next morning. We skirted the coast for a few miles wondering at the many caves and bridge rocks. About 10:00 a.m. we laid over on the port tack taking a broad angle into the channel. Gwemmy took the long swells easily, working to windward with very little spray and a most comfortabe motion, but to get any speed she needed hard driving. Her heeling angle is not uncomfortable despite the high rig, and once this angle is reached nothing can drive her farther. We Rosa Passage, planning to make the eastern portion of Bechers Bay, run along the shore to the western anchorage and then across to San Miguel. An hour's sailing carried us into steadily increasing wind and much rougher water. Santa Cruz was astern, ahead the waters were yellowish, the waves were steep, close together and white capped. We realized our mistake too late. The channel is shallow, the wind sweeps it night and day gave the western point a broad berth, then started across Santa stirring up a really serious popple. I suppose a lean, hungry boat woud have slopped through those waves, but Gwemmy has a bluff bow, she is shallow with hard bilges and every wave was a slap in the face stopping forward movement as effectually as a stone wall. As we neared the shore the seas became even more disorderly. One or two old gray-beards climbed over the windward side, and on top of this the wind seemed to be chasing its tail from southwest to northwest, veering from one point to another, probably influenced by the configuration of the hills.

Our whole philosophy of sailing has been stated. There are no head winds. The motor was started, we came about, and with a fair breeze astern we fairly planed around Skunk Point into the lee of the southern shore. Within half an hour we were skirting long rows of rolling sand dunes (sand and wind seem boon companions) in a sea as smooth as a mill pond. The change seemed incredible. We dropped the flapping canvas, edged in close to the kelp and trolled for two hours, catching a fine lot of rock bass. About 4:00 p.m. a cold wind whistled down from the hills, we sought the shelter of Johnson's Lee and dropped anchor in three fathoms, deep in the kelp.

To anyone cruising among the outer islands, Santa Rosa, San Miguel and San Nicolas, I would offer one bit of advice. Double the weight of your ground tackle. Another thing we learned: approach these islands from the north, slip down on them from that direction and get into a good anchorage before the wind finds you out, and at all events don't go pushing up through the narrow passages unless you relish punishment. Surely it can be done, but what's the use?

The truth of this last statement we found to our heart's content when we attempted the San Miguel passage the next morning. Aside from Freddie falling overboard and the intake valve of the toilet breaking loose from the hull, leaving us looking into the blue ocean through an inch stream of water, nothing much happened until we started to force the passage. Freddie clambered aboard rather shamefacedly; the hole we plugged in a few minutes and incidentally cleared up the source of a very annoying leak—thankful that the accident happened then, rather than one of a number of other times.

And about the channel: Past the point we could see a turmoil of water. It looked rough and it was rough. The first gust drove us head up. For an hour we barely crawled. It was shallow water again, the waves were exceedingly steep and very close together. The motion of the boat was unpleasant to say the least. For an hour we toiled slowly ahead, hugging the

(*Continued on page 78*)

Advertising index will be found on 3rd last page

Universal MOTOR CO.
NOT CONNECTED WITH ANY OTHER FIRM USING THE NAME "UNIVERSAL"

At the Show

FOR THE FIRST TIME

"the BLUE JACKET"

(with a sweetheart in every port)

A high-quality marine motor, entirely new in design, light in weight and husky in power, to give the pleasures and advantages of inboard motor boating to all users of small runabouts.

Also

Radical new improvements throughout the famous Universal Line.

New York Showroom: 44 Warren Street

UNIVERSAL MOTOR COMPANY *Dept. MBG-1* **Oshkosh, Wisconsin**

London Showroom: 22 George Street, Hanover Square West

UNIVERSAL

MARINE MOTORS

A "Big Shot" in '55—

In 1855, in a little shipyard at Mystic, Connecticut, was built and launched an American clipper ship named for our illustrious President, "Andrew Jackson." To the glory of these shipbuilders in 1860 she wrested the speed championship from the "Flying Cloud" in a race from New York to San Francisco around Cape Horn, making the run in 89 days and 4 hours, or 4 hours faster than the record of her fleet rival.

Today, seventy years later, in this same yard are being built SEVEN SEAS CRUISERS, the last word in motor yacht luxury, speed and comfort. Fifty feet overall, individually decorated by grace of Joseph Urban, and powered with twin Sterling Engines, these SEVEN SEAS CRUISERS are the proud work of the skilled craftsmen whose forefathers gave us the "Andrew Jackson" and other famous Mystic ships. A product of the ALMAC YACHT CORPORATION, Louis O. Macloon, President. Inspection at the plant or correspondence invited. One of these SEVEN SEAS CRUISERS will be ready for delivery in Southern waters during February.

Note—Painting by Lars Thorsen, celebrated marine artist of Mystic

THE CHANNEL ISLANDS OF SOUTHERN CALIFORNIA

(Continued from page 76)

kelp to avoid as far as possible those harassing waves. For a long time we had been watching San Miguel take shape through the mists. There is something more than fascinating in seeing the gradual separation of reality from the enveloping fog. Here a point stands out clearly, yonder a cliff rises, bit by bit the whole becomes apparent. So did San Miguel grow, and as it grew the fathoms of water beneath us became less and less, the wind more gusty as if determined to block our way by every possible means. The waves seemed genuinely in earnest. On the chart we were in six fathoms; to port was deeper water but steeper, angrier seas, to starboard long fields of kelp. We wanted more water, we would have welcomed a thousand fathoms but it was not there. We were learning.

I had hoped to get to San Miguel; not that it mattered at all, but it was an ideal, for the moment as far away as if I had been standing on the mainland. On that bleak windswept little sand pile the intrepid Cabrillo had wintered, there in Cuyler Harbor he had died, and solemn Portuguese monks chanting the slow Requiem had entrusted his body to the water near Prince Island Rock. Cuyler Harbor should be a shrine for Californians. I guess it was all sentiment—but I hated to turn back. Excuses—we were getting a little short on time—the lockstep was calling come back to your picture petticoat and jingle cap—come back to the daily routine of duties. We held a hasty conference in the cockpit. Next year we would do it better—up the coast to Point Conception, then down on the north side—so down hard on the helm, a quiet spot, reaching with the foresail ballooning, the ignominious flag of retreat. There are no head winds! But we were all a little sheepish looking.

Late in the afternoon we anchored in Cochies Prietos on Santa Cruz, a ittle cove tucked in behind a reef with protection from everything but heavy southeasters. A little house on the beach with people beckoned us, so we landed and found a rather cold welcome until the canny Swede lobsterer (whose name was Hjalmar) discovered I was a doctor.

"Paul—oh Paul," his voice boomed.

Paul came out on the tiny veranda, his right arm, twice its natural size, in a sling. A hasty examination showed nothing alarming. A wasp had stung him and apparently he was sensitive to such bites. But a stiff drink of——(Pardon me, Mrs. Willebrandt)—anyhow Paul felt better and the place was ours.

Hjalmar's wife appeared. We sat and talked for hours, urged along by large mugs of Hjalmar's excellent brew which would put the best ale to shame. For eight years they had worked out of Cochies Prietos trapping lobsters. Some years they made good money, some years not so much, but it mattered little. The woman had a thrifty little garden, they had fish and plenty of simple wholesome food. They were happy, contented, satisfied. It would take a Thoreau to tell it as it should be told.

We need ten million Thoreaus in this land of killing competition—ten million men to shame the picture petticoats, the jingle caps, the lockstep into well deserved obscurity—ten million men who have the vision to rise and rip the gaudy tinsel from our standards. Today I know where there are three and I am glad to have known them.

We tore ourselves away—one leaves Utopia under protest—and eventually found a windy anchorage in Wilson's Cove at the north end of San Clemente. This Island lies sixty miles south from San Pedro. For a great many years it has been under lease, the proprietor running many thousand head of sheep. The north coast is a sheer cliff for fully three-fourths of the length of the island, for all the world reminding one of the rim of some huge volcanic crater. There are few anchorages along the island, and these in troubled waters. At one time it was the center of fishing but even fish are scarce now.

The trades were true to form next day. The sail across the channel was as nearly perfect as one could wish. Half way, two power cruisers passed us, outward bound, our first evidences of how close we were coming to the dusty roads and musty smells of respectability. We rounded the south end of Catalina at mid-afternoon. An hour later the whole demoniacal fanfare burst upon us—a harborful of smug polished cruisers, big sightseeing boats, aeroplanes. Moby Dick and I watched it rather silently—I think a little disdainfully. Freddie had four dollars burning his pockets and was more than disgusted when he found our stay at Avaon would be limited to the time necessary for getting gasoline aboard. He had visions of ice cream and motion pictures.

We anchored in White's Cove about 5:00 p.m., glad to get by Avalon safely—but we knew the lockstep had us. So we sailed home—sorry for once we had a fair wind.

Advertising index will be found on 3rd last page

MIAMI BEACH

Is Calling You

COME to Miami Beach, in the sublime climate of the semi-tropics, for a real health-building and happy vacation this winter. Here at the World's Winter Playground you have every facility for enjoying your favorite summertime sport under ideal conditions. Golf —Fishing—Polo—Yachting—Bathing—Tennis—Motoring and many others.

Make no plans for your winter vacation until you have written for full information regarding the season's program at Miami Beach. For hotel, apartment or cottage accommodations address: Chamber of Commerce, Miami Beach, Florida.

Plan to be here for the International Speed Boat Races on Biscayne Bay, March 25 and 26th.

You'll find them at the

DWIGHT LUMBER COMPANY
Boat Division, Dept. 51
Detroit Michigan

Gentlemen:
Please send me full information on:
( ) The Dee Wite Dealer Franchise.
( ) The new 1930 Dee Wite Line.

*Name*_____
*Firm Name*_____
*Street*_____
*City*_____ *State*_____

New York Boat Show JAN. 17-25

Advertising index will be found on 3rd last page

New York Show

Dee Wite's ten beautiful models for 1930, already the sensation of the boating world, will be shown to the general public at the New York Silver Anniversary Motorboat Show, January 17 to 25. For the first time in the history of motorboating, a fine line of genuine mahogany V-bottom runabouts, of finest design and sturdiest craftsmanship, will be offered at a moderate price. Thousands have waited for such boats for years, envying those whose income permitted the ownership of one of these hitherto expensive craft. Now, through Dee Wite, the possession of a fast, sleek mahogany motorboat is within the reach of everyone.

Long months of experimenting with hull designs and power plants has evolved these Dee Wites, and thousands of dollars already expended guarantee their perfection. Nothing but the best of materials has been used throughout, and the finest motorboat craftsmen have been hired to build them. The Model 1, for outboard power, so popular during the last two seasons, will be continued with many improvements and added features. Model 2 will be hull only, for use with the Van Blerck, Jr., motor. Eight additional models will be inboard powered, with 4, 6 and 8 cylinder motors, and additional speeds up to 40 m. p. h.

The largest and most responsive buying group in the world waits for such motorboats—and only in the Dee Wite line for 1930 can they find such quality boats, beautiful in appearance, high in quality, completely equipped—and moderately priced! Dee Wites will retail at from $535 to $2285—the price range wherein lies 85% of the motorboating market.

See the Dee Wites at the show, and compare them with any line, regardless of price. Consider their possibilities, and the reputation of the company behind them. Consider their broad appeal to boat purchasers who will be instantly impressed with their many unusual qualities, both in design and performance. Then, if you want success and profit in the motorboating field—write or wire for full details on the Dee Wite Dealer Franchise proposition.

DWIGHT LUMBER COMPANY
ESTABLISHED 1866
Boat Division, Dept. 51 Detroit, Michigan

Dee Wite

A Great Motor
for Your New Boat

No boat is more reliable than its motor.

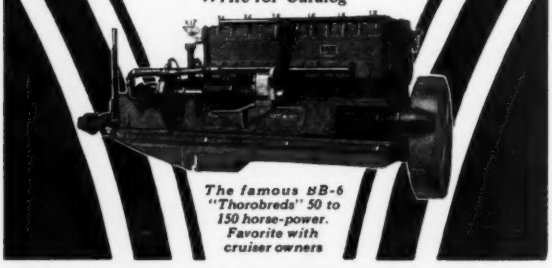
And you can select no motor more reliable, powerful and enduring than a Red Wing—recognized as one of the best for 28 years.

Write for full information about the famous "Thorobred" line—now, while there is plenty of time to make comparisons.

Red Wing Thorobred
THE MOTOR WITH POWER TO SPARE

Built in 18 sizes—1 to 6 cylinders
4 to 150 horse-power

Write for Catalog



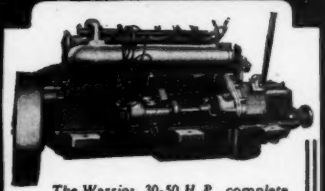
The famous HB-6 "Thorobreds" 50 to 150 horse-power. Favorite with cruiser owners

RED WING MOTOR CO.
RED WING, MINN. U.S.A.

Now the Reports are coming in!

READ WHAT THE
RED WING "WARRIOR"
is doing in Maryland

Writes F. B. Eisenbrandt, Baltimore, Md.—
"We are surprised at the Warrior's power and smoothness. It drives Mr. Hucke's 38 x 8½-foot boat at better than 9 miles an hour, turning an 18 x 12 wheel at 1,250 R.P.M. No one expected this boat to ever do better than 8 miles, regardless of the size of motor placed in it. Comments on the Warrior by other boatmen have been very favorable."



The Warrior, 30-50 H P., complete with Paragon 90% reverse gear and 2-unit, 6-volt electric starting motor and generator Bore 3⅛". stroke 5". Piston displacement. 230 cubic inches.

PRICED AT
$495 WITH STARTER
RED WING MOTOR CO.
RED WING, MINN.
U. S. A.

CARIBBEAN BLUE

(*Continued from page 33*)

house which was Mr. Holliday's headquarters at his camp I swung my hammock next to that of a young Englishman. This turned out to be none other than the Hubert Payne, of Livingston, whom I had been hunting for several days because he was supposed to know the whereabouts of an old Maya incense burner which had been found in a cave and was now reputed to be in the possession of one Senorita Gutierrez, who was cooking for Mr. Payne. But alas, that incense burner was not yet to be mine. Payne said that it was locked up in Miss Guiterrez's trunk in Livingston, and that she herself was at his own camp several miles west of here. But she would be coming to Livingston in a few days and if I happened to be there then perhaps I could persuade her to part with it, opined the bearded lumberman.

Chocchoc, as this lumber camp is called, is a camp without women. It has other dangers, however, including crocodiles. Some time before we reached it two of the employees of the lumber company decided to go for a swim. But the head of the first man in had hardly struck the water before it was crushed like an egg-shell. His companion, however, giving a very rare exhibition of courage, dived in after him and made such a splashing that the big croc released the first man and swam away. The first swimmer was still breathing, and he was put aboard a motorboat which started down stream to reach the United Fruit Company's hospital at Puerto Barrios. Hubert Payne says, however, that "his head was as flat as a pancake," and of course he died long before the motorboat reached the mouth of the Sarstoon.

Virtually no archæological exploration has ever been done in the strip of land between the Sarstoon and the Rio Dulce-Golfete waterway system, some thirty-five miles south of it. This country, which is largely hilly, offers fascinating opportunities to the archæologist and also to the ethnologist. Nine miles south of Chocchoc is the Indian village of Nimla Ha (Big Water). Also in the same neighborhood are the Indian villages of Chocun, Tomagass Creek, Cruschen and Suksitip. It would have been interesting to have visited all these villages, particularly as the natives of them are reported to be quite primitive and probably still manufacture some of the old fashioned Indian products which the Museum in New York would have been very glad to have. However, as my chief interest remained in the tracing out of the old trade route and as I believed that such a route, in order to connect with the Pasion River, would have followed the northern or San Pedro branch of the Sarstoon rather than this southern branch on which Chocchoc is situated, I decided, after half a morning at Chocchoc, to go back to the mouth of the San Pedro branch and ascend that river.

I found this San Pedro branch narrower than the main branch which I had just left. Before we had ascended it more than two or three miles it was hardly above sixty or seventy feet wide—a lovely stream with solid banks five or six feet high which were feathery with the tender leaves of bamboo. Elevated as they are, these banks are submerged in flood time, said John Devil. The old negro kept expressing a desire to fish, and constantly descanted on the attractions of the finny denizens of these waters. He said there were tarpon, tuba—a fish about eight inches long,—mountain mullet, which gets to be fourteen inches long—and mechaca, which sometimes reaches a length of twenty-four inches. But I had other fish to fry and refused to waste time on mechaca and mullet.

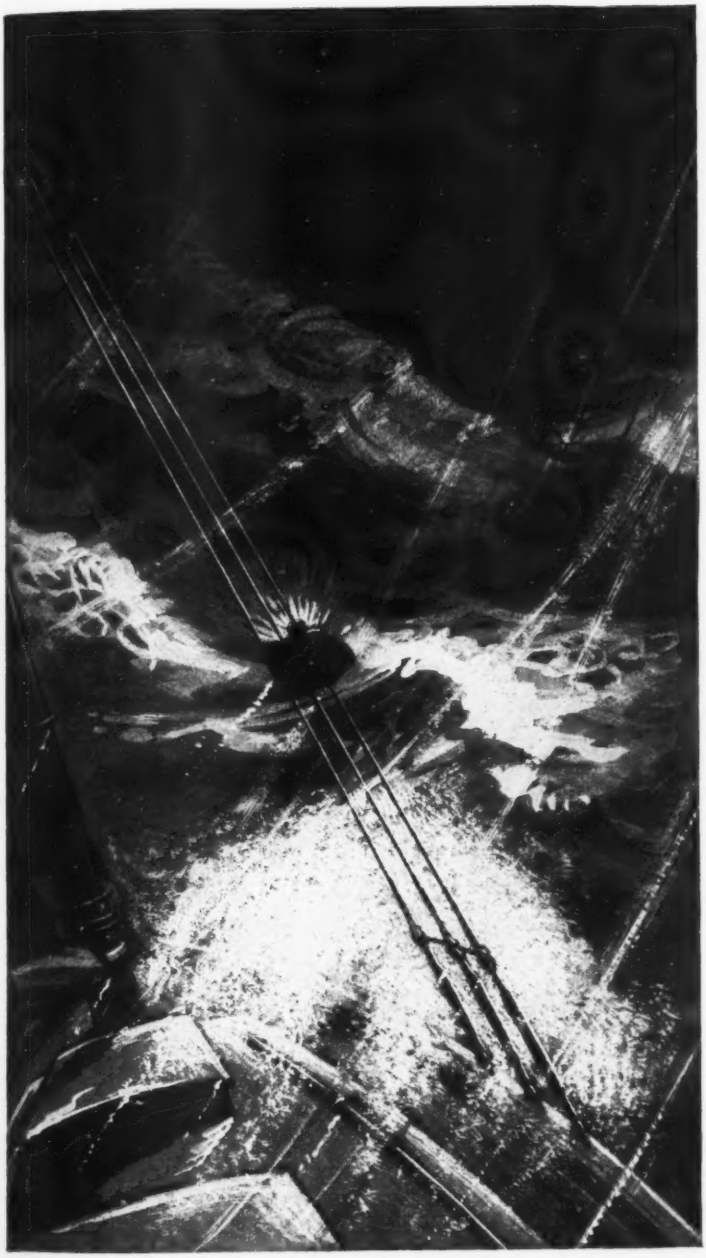
After we had run an hour and ten minutes from where our slow but beautiful river had joined the main one, we swung around a bend and saw two hundred yards ahead on a high bank the tiny log dock and the two buildings of the place locally known as Pishon's Landing. Paul Pishon is a mahogany man well known in Livingston. His supervisor at this camp, W. L. Berry, of St. Paul, Minnesota, a tall thin man with white hair and the resourceful taciturn look of the true frontiersman, came down the bank to meet us. Berry made us very welcome, and John Devil and I hung our hammocks in the nearly empty building with log walls and thatched roof which served Berry as a store-house.

It was too late in the day to do anything but make tea and talk. Berry told us amusing stories of friction between himself and the Indians of the village of Dolores, a few miles back in the bush—which I intended visiting the next day. The trouble was caused by the fact that Paul Pishon charged the Indians fifty cents duty on every pig which they brought through his camp for shipment to Livingston. They had to bring their stock this way because just above Pishon's Landing are bad rapids which make canoe traffic impossible, and below Pishon's Landing is thick bush without trails. Pishon justified his levying of duty by the fact that when the Indians sell him a pig for the sustenance of his mahogany cutters they charge him fifteen or

(*Continued on page 84*)

Advertising index will be found on 3rd last page

"Heaven Help the Poor Sailors on a Night Like This!"



Wasted sympathy when you have a stout boat, a stout-hearted skipper and stout Laughlin turn-buckles. Comes instead, the wild exultation of triumph over the gale-lashed seas, and a just pride in your able craft.

True, there's terrific strain on the equipment—on, for example, a few threads of the turnbuckles on the weather shrouds! Laughlin turnbuckles stand such tests! They are hot-dipped, galvanized *after* the thread is cut—no exposed iron for rust to get in its deadly work. Plenty of strain on Laughlin turnbuckles—no strain at all on the skipper's mind!

All Laughlin items of marine hardware are skillfully designed to meet the special strains—the harsh abuse—that comes with marine service. Better standardize on fittings insured by the Laughlin trade mark!

Send for special folders

The THOMAS LAUGHLIN Co.

Marine Hardware - Drop Forgings - Wire Rope Fittings

144 FORE STREET

Portland Maine U.S.A.

NEW YORK - CHICAGO - NEW ORLEANS - SEATTLE - SAN FRANCISCO - LOS ANGELES

Gifts for Yachtsmen

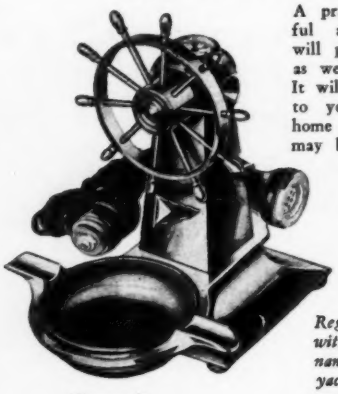
SHIP'S BELL CLOCK
No. 10

A beautiful cast brass marine clock which has an accurate and reliable jeweled movement. It sounds off the hours in the regular eight bell ship's fashion on a melodious spiral gong.

Diameter of Pilot Wheel 8 inches

Brass Finish $37.50
Bronze Finish 43.00

High Grade Combination
ELECTRIC CIGAR LIGHTER
with Ash Tray, Marine Binnacle, Steering Wheel, Cigar Punch and Compass



A practical and useful appliance which will prove ornamental as well as convenient. It will add distinction to your office, ship, home or yacht, and may be plugged-in to any electrical service outlet. Made for use with 110 volts.

$17.50

Regularly supplied with yacht pennant. Your own yacht club flag may be supplied to order at a small additional cost.

(Patented)

Miniature Steering Wheel

This wonderful little symbol represents a steering wheel in miniature, measuring ⅞ in. across the spokes. The rim is accurately turned and drilled, and is made of genuine Porto Rican cocoa-bola, dark red in color and finished with several coats of lacquer. Spokes and hub are heavily plated 18 karat gold.

Price $1.50

Complete stock of Marine Supplies

TOPPING BROTHERS
159 Varick Street, New York City

CARIBBEAN BLUE

(*Continued from page* 82)

sixteen dollars for each of the animals which they sell in Livingston at eleven or twelve dollars apiece.

The next morning I slept until the disgustingly late hour of half past seven. After about six helpings of bacon and pancakes from the swell cuisine of Mr. Berry I started up the trail with John Devil for the Maya Indian village of Dolores. This was an up and down hike which I judged to be about five miles in length.

The most interesting thing about Dolores is much more significant of the British than it is of the Mayas. This is the fact that Dolores is a compact settlement—such a conglomeration of adjacent houses as we think of when we use the term village. Whereas, the Indian settlements I had been seeing on the Guatemala side of the Sarstoon were so scattered that from one house you could scarcely ever see another. The explanation is simple. The Indians are afraid of the Guatemaltecans, whereas they trust the British.

But this was the only fact about Dolores which interested me. Never have I seen a human settlement which so closely resembled a pigsty. True enough the situation was ideal, with a brook running through the village, and—on this particular morning—stunning clouds hovering above the cloud-like mountains which surround the town. But the natives are filthy in their personal appearance, and in their habits—such as the custom of throwing litter into the trails between habitations. This is so much unlike the custom of the Mayas elsewhere—who are among the cleanest people I have ever encountered—that it made the more impression on me.

John Devil and I went from hut to hut, taking photographs and trying to buy native products, such as weaving. The men wear the conventional cotton shirt and cotton trousers, but the women are naked above the waist, and if it does seem cynical to say so such a costume on the part of the fair objects of a photograph gives that photograph considerably more commercial value to American magazines than where the object of the photograph is clothed with Victorian completeness.

I was so fortunate as to find a sample of weaving actually on the loom, in the process of manufacture. Stupidly I showed my pleasure at the sight of this piece of native industry of a type which I had been hunting for all over Central America, with the result that I could not get it at anything less than the outrageous price of five dollars.

I had nearly completed my shopping tour of the village when an anaemic looking Indian approached me and informed me that I was under arrest and must accompany him to the calaboose. It appeared that the Indian villages in British Honduras were just then maintaining a quarantine against arrivals from the Indian villages in Guatemala, and I had come to Dolores without the proper papers.

The old Indian constable kept inviting me to step into the *càrcel*—a mere typical one-roomed hut of upright log walls and dirt floor—and to rest my shotgun with him. But, pretending a complete ignorance of Spanish, I seated myself on the threshold of the jail and refused to budge either in or out.

Meanwhile John Devil ran about interviewing various important citizens of Dolores and explaining that I was the victim of a very unfortunate mistake. So eminent was the status which he attributed to me that the natives began to be afraid they had made a serious error. Hence, when I had the brilliant idea of suggesting that I might be permitted to leave after signing a paper addressed to the Colonial Government at Belize and apologizing for my mistake in entering Dolores without the proper credentials, my suggestion was rather eagerly adopted. They were obviously rather glad to be rid of a large, obdurate stranger who insisted on sitting on the threshold of the jail as if he were the Warden instead of entering the edifice in the manner expected of a prisoner. So after I had written out a letter, which certainly gave a good laugh to the Colonial Secretary in Belize if it ever reached him, John Devil and I left Dolores for Fishon's Landing. BUT—and this is indeed a large but—before we left this village we were told by several of the older citizens that there had in ancient times been a trail overland from Dolores to the Pasion River. Of course, the Indians of Central America have the annoyingly polite Latin-American habit of telling you what they think you want to hear; and I should like to check up their statements by more investigation before giving it complete credence. Yet, on the face of it, here was quite a substantial confirmation of my own theory concerning the ancient existence of a trade route up the Sarstoon River connecting with the Pasion River and the Gulf of Mexico by means of an overland trek across the territory in which the modern village of Dolores is situated.

After John Devil and I had lunched with old man Berry we lost no time getting aboard Stella and starting down stream. As we swung around the bend we had a last glimpse of the white-

(*Continued on page* 88)

MATTHEWS
Uses
HYDE PROPELLERS

The Matthews Company of Port Clinton, Ohio, Designers and Builders of Thirty Years' Experience, Equip all of Their Stock Cruisers with HYDE PROPELLERS

THE MATTHEWS "46" SPORT CRUISER

MATTHEWS Says, *"On all Matthews Stock Cruisers Hyde Windlass Propeller Wheels are standard equipment. The Matthews Company regards the Hyde Company as partly responsible for the great popularity of Matthews Stock Cruisers today."*

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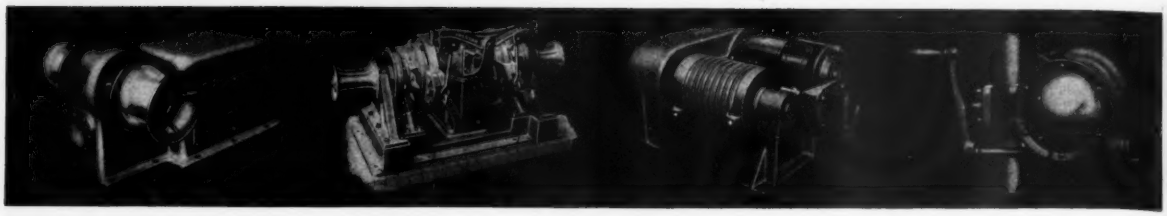
Your boat will be more dependable if Hyde Equipped.

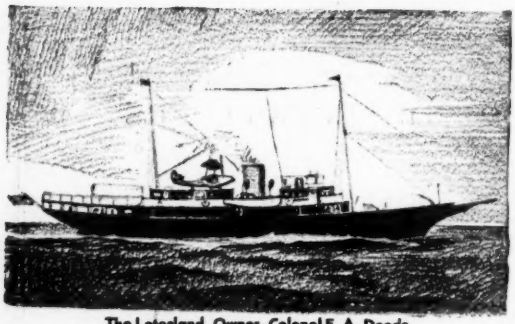
Send for a copy of "Propeller Efficiency." We will be glad to mail it without charge or obligation on your part.

HYDE WINDLASS COMPANY
BATH, MAINE



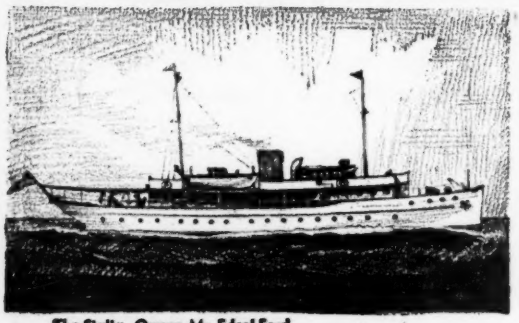
. . . On the Boats

A-E-CO



The Lotosland. Owner, Colonel E. A. Deeds.
Architects, John H. Wells, Inc. and Cox & Stevens, Inc.
Builder, Pusey & Jones Corp.

The Memory III. Owner, Mr. A. E. Fitkin.
Designed by Thomas D. Bowes. Builders, Defoe Boat and Motor Works.



The Sialia. Owner, Mr. Edsel Ford.
Designed by Henry J. Gielow, Inc.
Builder, George Lawley & Son, Corp.

SEE THEM AT THE SHOW . . .

There's beauty to catch an artist's eye in these finely proportioned, well-designed machines. When next you see them at the Show or on a yacht, note how every curving line of hoist or windlass reveals fitness for the work to be done.

A-E-CO Auxiliaries need no added ornament. Their beauty is inherent. Clean-cut, simple, they breathe the spirit of the sea . . . just seem to "belong" on any yacht. Even the humble steerers, that serve so faithfully below deck, appeal to those able to appreciate mechanical excellence.

Added to this fundamental beauty of design is the beauty that results from careful workmanship by skilled craftsmen. And not least is the beauty of finish . . . of polished brass or gleaming nickel . . . that hints of the quality of the materials used throughout these fine machines.

The machines in the panel at top of left-hand page, from left to right, are: Horizontal Electric Hoist; Worm-geared Electric Windlass; Electric Drum Type Steerer; Worm-gear Davit Winch.

At top of right-hand page: Type "D" Boat and Sail Hoist; Type "G" Electric Windlass; Hand Windlass Type "J", No. 0; Motorboat Electric Windlass.

American

Company

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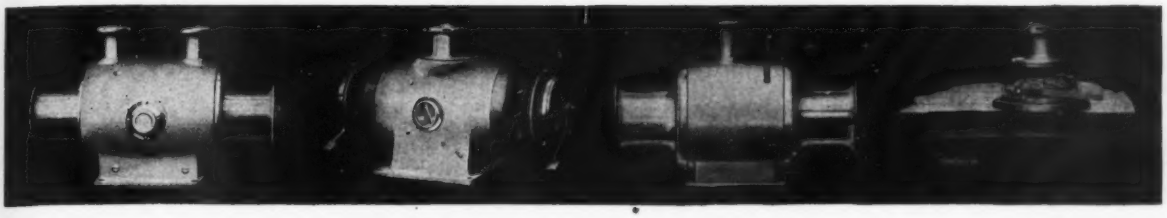

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Auxiliaries

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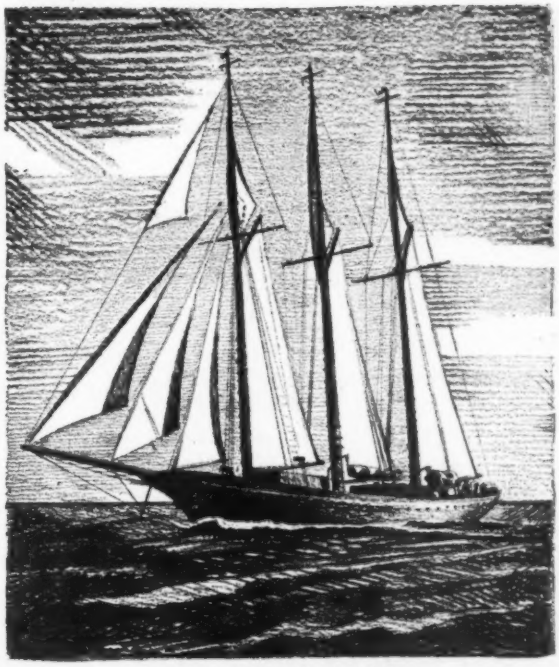
Best of all, A-E-CO Auxiliaries are as good as they are good looking.

Every machine that bears the A-E-CO mark is strong, rugged, absolutely dependable. These machines are the product of an organization that for more than seventy years has been designing and building machinery for naval and commercial use. A-E-CO engineers know the sea and the requirements of marine service.

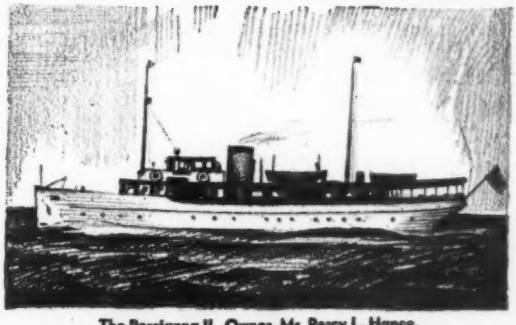
Check the things that you require of a steerer or deck auxiliary . . . power, efficiency, convenience of operation, strength, simplicity. You find them all in every A-E-CO machine.

How secure you feel when you rely on an A-E-CO steerer . . . how easy it is to weigh an anchor with an A-E-CO windlass . . . how quickly a heavy tender can be handled with an A-E-CO davit winch . . . how conveniently you can run up a sail with an A-E-CO hoist! Any A-E-CO machine can be depended on always for its full rated capacity, plus a liberal margin.

No wonder that particular yachtsmen demand A-E-CO equipment or that designers specify these machines for their finest work.



The Migrant. Owner, Mr. Carrl Tucker.
Designed by Henry J. Gielow, Inc. Builder, George Lawley & Son, Corp.



The Persianna II. Owner, Mr. Percy L. Hance.
Designed by Tams & King. Builder, J. M. Densmore Company.

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It is harmless, non-acid, greaseless. An ideal polish for marine use, for, by its chemical make-up, it produces a lustre that tends strongly to delay tarnishing.

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THE LIVINGSTON CO., DIV. T
NEW HAVEN, CONN.

I·C·U
METAL POLISH
for BRASS, COPPER, BRONZE

CARIBBEAN BLUE

(*Continued from page* 84)

haired old man waving goodbye at us from his lonely bank. It was like the end of a novel.

When we came to Guarry Creek we shot into this stream for about a mile and then camped for the night. The next morning we made a few purchases from the Indians of the village named for the stream and were able to make Sarstoon village at the mouth of the main river by nightfall. Before noon of the next day we were in Livingston; unloading the pieces of textiles and other samples of Indian industry which we had bought.

A day later we pointed Stella up the river Dulce with the object of exploring a large cave which we had heard of as situated on a small stream which flows into the Golfete, the large body of water of irregular shape between the river Dulce and spacious Lake Izabal. And although the river with this cave is called the Chocon, it is a different stream from that branch of the Sarstoon with almost the same name which we had recently visited. The two rivers are on opposite sides of the watershed created by the Santa Cruz mountains, and yet I judge that their headwaters were not very far apart, although this country has been hardly explored at all. The Rio Dulce has a current of two or three miles an hour. A short distance upstream from Livingston on the north bank are some stunning chalk cliffs. They come down to the water almost as steeply as a wall. Unfortunately the first ten or twelve feet of chalk above the river has been defaced by tourists. Thus we were able to obtain the interesting information that Mr. and Mrs. J. J. O'Connor, of Chicago, had passed by here in 1918.

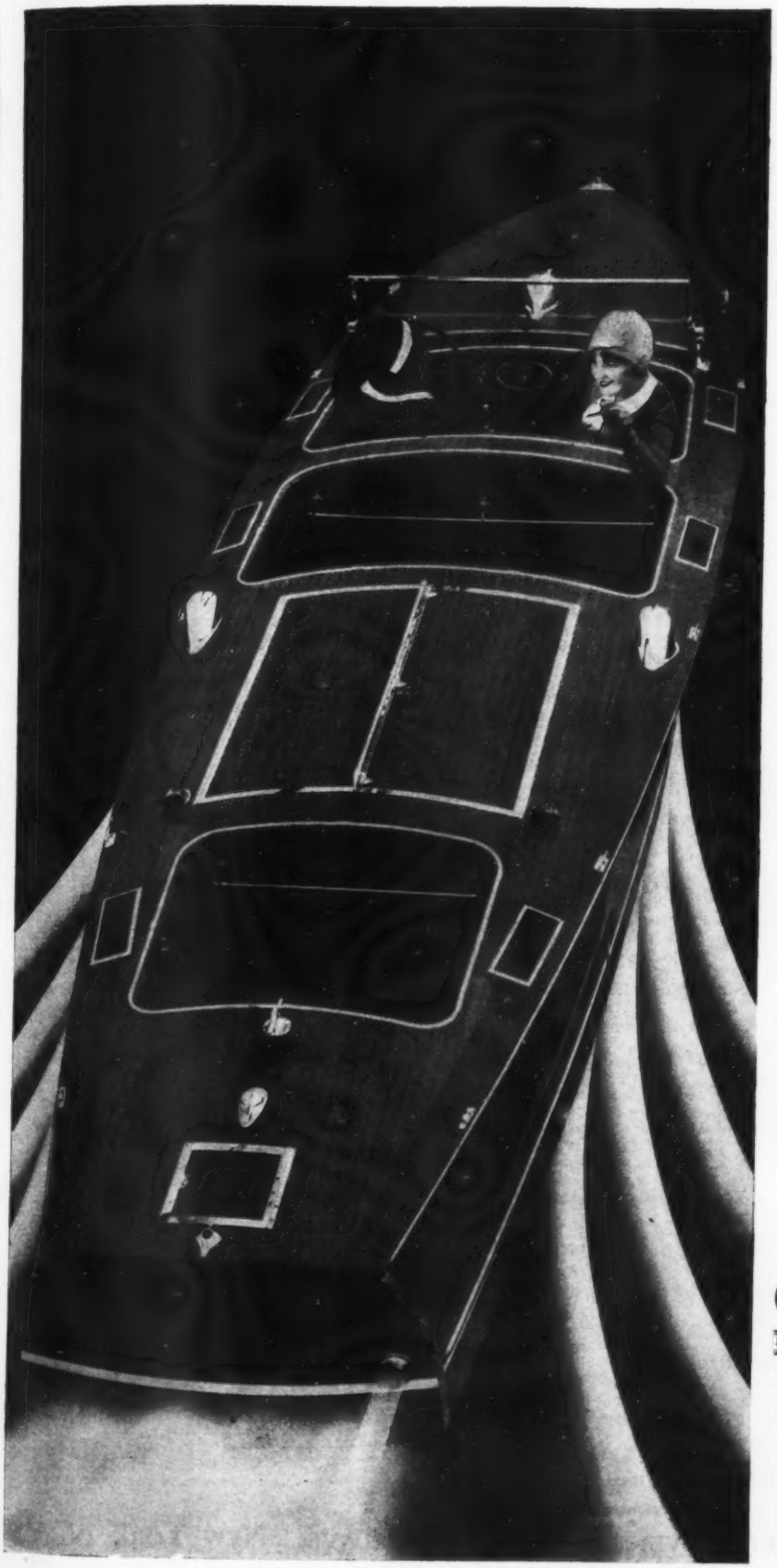
We had left Livingston at 7:55 A.M. We reached the Golfete at 10. It was as calm as a mill pond, reflecting the blue sky and the white clouds above. Mountains crouched nearby on the south. To the north low hills loitered further back. To the northwest were the high Santa Cruz mountains, and to the west, far beyond Lake Izabal, were other high blue masses of land.

At 10:40 we reached the bar of the Chocon River. Never have I followed a river which twisted like that one. One minute we would be heading northwest, the next minute southeast. After three hours of this sort of doubling, which kept us shifting our hats constantly to hold the brims down against the sun, we ran Stella's nose into the bank. It was a steep bank, the base of quite a small hill. Scrambling up this fifty or seventy-five yards we came to the mouth of the cave. It was a big cave—hung with the usual stalactites—though not so big as some I had explored in British Honduras. It was comparatively easy to investigate because it had a rear entrance which let in a great deal of light. Perhaps owing to this fact we found very little loot. I believe the cavern had already been robbed by persons from Livingston. But we were so fortunate as to find large fragments of a very nice vase with incised decorations, which the experts of the Museum of the American Indian in New York were afterward able to fit together so well as to produce a very good piece of ceramics.

For several days we had been expecting the rainy season to begin, as it was now quite a little bit overdue. When we came out of the cave to concoct some lunch the rainy season met us. Large drops of water were beginning to fall, and towering black clouds in the west showed us that this *was* just the beginning. The one thing the explorer craves above everything else is a dry bed. It looked as if an immediate start would be necessary if we were to enjoy a snug camp this evening. So boarding Stella we turned her head down stream, munching a few soggy sandwiches as we went. The wind rose rapidly. We realized there might be a nasty little chop on the bar of the Chocon, and to make matters worse darkness fell over us before we could reach that danger spot. But we got through without shipping more than a gallon of spray, and then, with the waves a-beam, we ran for an hour in a westerly direction, our objective being a little settlement called Bacardia. As the wind kept rising and the spray flew over us in increasing volume, I began to fear lest dampened spark-plugs would cause the motor to fail us and necessitate a row to Bacardia, which would certainly be very difficult, and might be impossible. In the latter event our only recourse would be to slide off the wind and beach Stella on the lee shore, which would certainly mean getting most of our dunnage well soaked. It was a great relief, therefore, to see two tiny points of light where candles illuminated two of the chief huts of Bacardia.

After a comfortable night in this hospitable native settlement we pushed on to San Felipe, a village about an old Spanish fort which guards the narrow opening between the Golfete and Lake Izabal. We did not have time to make the trip to the head of this great lake, some thirty miles away, because my steamer from Puerto Barrios to the United States was due to sail in two days. But before leaving San Felipe I confirmed the rumor of the existence of mounds and other traces of ancient settlements on the south side of Lake Izabal which I intend to explore and perhaps excavate some other time.

(*Continued on page* 92)



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Ordinarily, nothing is so static, so stolid as a boat on a display stand. But you can not look at these new Gar Wood models, high and dry on the Palace floor, and avoid the feeling that they are poised for flight. There's tangible promise of that elation awaiting you when this shining, sweetly turned vessel finds her element, when you slip into her deep cushions, take the wheel in your lap and let her show you what a boat can be!

These 1930 Gar Wood models represent so many improvements, so many new ideas both great and small, that you really must come to the Show and see them for yourself. But, if you can't make it, we arrange by means of the coupon below to bring the Show to you.

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Volume XI

Motor Boat Building

By H. W. Patterson, William Atkin and Others

With Chapters on How to Design a Motor Boat, Reading the Different Plans, etc., and Twelve Complete V-Bottom Designs by William H. Hand, Jr.

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1. Laying Down the Lines
2. Continuing the Work of Laying Down the Lines
3. Laying Down the Keel
4. Preparing Moulds and Setting Up the Frame
5. Bending and Fitting the Frames
6. Putting in Fore and Aft Members
7. Applying the Planking
8. Finishing the Planking
9. Deck Framing, Water-Tight Bulkheads and Decks
10. Interior Joiner Work and Finishing

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Starting Correctly to Build

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3. Constructing the Deadwood and Boring the Shaftlog
4. Various Methods of Stern Construction. Setting Up the Keel and Bending the Frames
5. Steaming Woods, Fitting the Floors, Frame Fastenings and Cutting the Limbers
6. Methods of Planking and Caulking the Hull
7. Beveling the Frames and Fitting the Deck Beams
8. Various Kinds of Engine Beds Which Are Suitable for Small Craft
9. Showing Two Different Ways for Constructing the Sides of a Cabin House with, in Addition, a Simple Type of Companion Slide, Companion Doors, and a Practical Design for a Flush Hatch
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3. Starting the Design
4. Locating the L W L
7. The Midship Section
6. Drawing the L W L
7. The Sheer Line
8. The Sections
9. Diagonals
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A good looking little runabout designed for an engine of about 20 h.p. which will carry four passengers at speeds up to 18 miles.

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A V-bottom cruising boat with a beam of 8½ feet arranged for an engine of about 30 h.p. which makes it fast enough to get anywhere and back again. The usual berths and galley equipment are provided.

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A fast runabout arranged with double cockpits with the engine amidships. Suitable for engines from 75 to 100 h.p. which will drive it at better than 25 miles. The beam is 5 feet 4 inches.

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A well planned little cruiser 25 feet in length, 7 feet 9 inches beam. Twenty h.p. is sufficient to drive it very comfortably and will not occupy much room. Berths for two and ample outdoor space is provided.

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A real deep sea cruising craft designed particularly for off-shore work. Has a substantial sloop rig and fine accommodations below. A small auxiliary engine is carried. The beam is 11 feet and the draft almost 6 feet.

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One of the early designs for fast cruising boats developed by Mr. Hand. Eclipse will accommodate an engine of about 150 h.p. and with this will be as fast as many boats of greater power. A thoroughly substantial and able boat.

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An economical cruiser design for a small boat for which an engine of about 50 h.p. will be sufficient. It has berths for two persons and the usual cabin and cockpit arrangement.

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Here is a real design for the deep sea sailor, a sea going able craft with a beam of 12½ feet and 6 feet draft. Schooner rigged with a powerful spread of sail following somewhat the fisherman type of schooner. An auxiliary engine of the heavy duty type can be fitted and ample accommodations are provided in this big boat.

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An unusual design for a fast boat built on the lines of a runabout and yet fitted with berths so that it can be used for cruising purposes. An engine of 75 h.p. will produce a speed of 25 miles or more.

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A simple design for an open boat 21 feet in length and arranged for a small four-cylinder engine of 12 to 15 h.p. Has an open cockpit in which seats are provided for the passengers.

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A double cabin cruiser design which will accommodate a large party in both cabins. The hull is of the V-bottom type and can be fitted with a powerful engine of 150 to 200 h.p. with which it will do from 26 to 28 miles per hour. The design has been thoroughly tried and has proven its ability.

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Are You Getting a GENUINE SEA-SKIFF?

KING SEA SKIFFS

Are Protected by Special Patented Features

BUILDING a craft of lap-strake construction does not make a sea-skiff. To construct a genuine sea-skiff, combining speed and absolute seaworthiness requires the work of a master builder. We are the originators of this type of boat, and hold patents covering its construction, which insure its speed and seaworthiness.

For the past 18 years KING sea-skiffs have made an enviable reputation all along the Jersey Coast where 80% of the fishermen are using them. Today they stand alone in real boat quality. The Customs Service in New York City has several KING sea-skiffs in service and four of these skiffs were built for the New Jersey State Wardens; all conclusive proof that the KING Sea-Skiff is truly King of the Sea.

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TWENTY-EIGHT FOOT SPORTSMAN
THIRTY-FOOT DeLUXE CRUISER
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Priced $1950 and up

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Immediate Deliveries Available

KING BOAT WORKS

HIGHLANDS, NEW JERSEY

OLIVE K, CHAS. F. KETTERING'S PLAYTHING

(*Continued from page 29*)

finder, fathometer and two searchlights, all of which are standard Sperry equipment.

The stabilizer is so arranged to take every bit of roll out of the boat. In her trial runs, which were made on Saginaw Bay, off Bay City, Olive K was sent into the trough of the sea with her stabilizer not in operation. An animated bridge game that was in progress in the living room of the boat was nearly ruined. Guests seated around the dining room table, in several instances found themselves with dishes in their laps. The boat tossed, churned, and nose-dived. Kettering went below. The stabilizer was started, and Olive K straightened out like a charm and rode in the trough after the fashion of a great liner.

Olive K, while an experimental boat—admitted or not admitted to be such—is soon to leave the East for the Southern coast, preparatory to an extensive cruise that long has been the ambition of Mr. Kettering. This cruise will be to a group of islands in the Southern Pacific. For this reason Olive K has a cruising radius of 7,000 miles at full speed, about 16 knots. At limited speed the cruising radius will be approximately 10,000 miles.

Olive K has a length over all of 170 feet. Her beam is 26 feet. She is, of course, entirely constructed of steel. This unusual craft was designed by Cox & Stevens in conjunction with John H. Wells, Inc., naval architects. She is the largest boat of her kind ever launched on the Great Lakes. Her keel was laid shortly after the first of 1929 and the boat, nearly completed, was launched in September.

While it is said that Mr. Kettering built an engine room and the necessary boat around it, the interior decoration represents Mrs. Kettering's ideas. She personally supervised this part of the work. The result would do credit to a professional decorator. In the living room Mrs. Kettering has a baby grand piano that is unique. It is equipped with non-rustable strings and its woods are joined by a special glue. Mr. Kettering suggested these points in view of the cruise contemplated for the Southern Pacific waters, as salt water atmospheric conditions there would be harmful to an ordinary piano.

At the bow end of the living room is an electrically operated fireplace, which is cut in with beautifully crotched mahogany panels. The entire boat is most beautifully furnished—especially is this true of the living room, library, dining room and owner's stateroom.

Astern of the pilot house are two large boats, one a sedan, the other a coupe. Mr. Kettering's sedan, 24 feet in length, is equipped with a 125-horsepower motor. The speedster coupe, same length, has a 100-horsepower motor. Then there are two other motor boats, each of which is 21 feet long. These are carried on the upper deck and each is equipped with an 85-horsepower motor.

Accommodations for the crew of 22 officers and men are below and forward. The galley is also below.

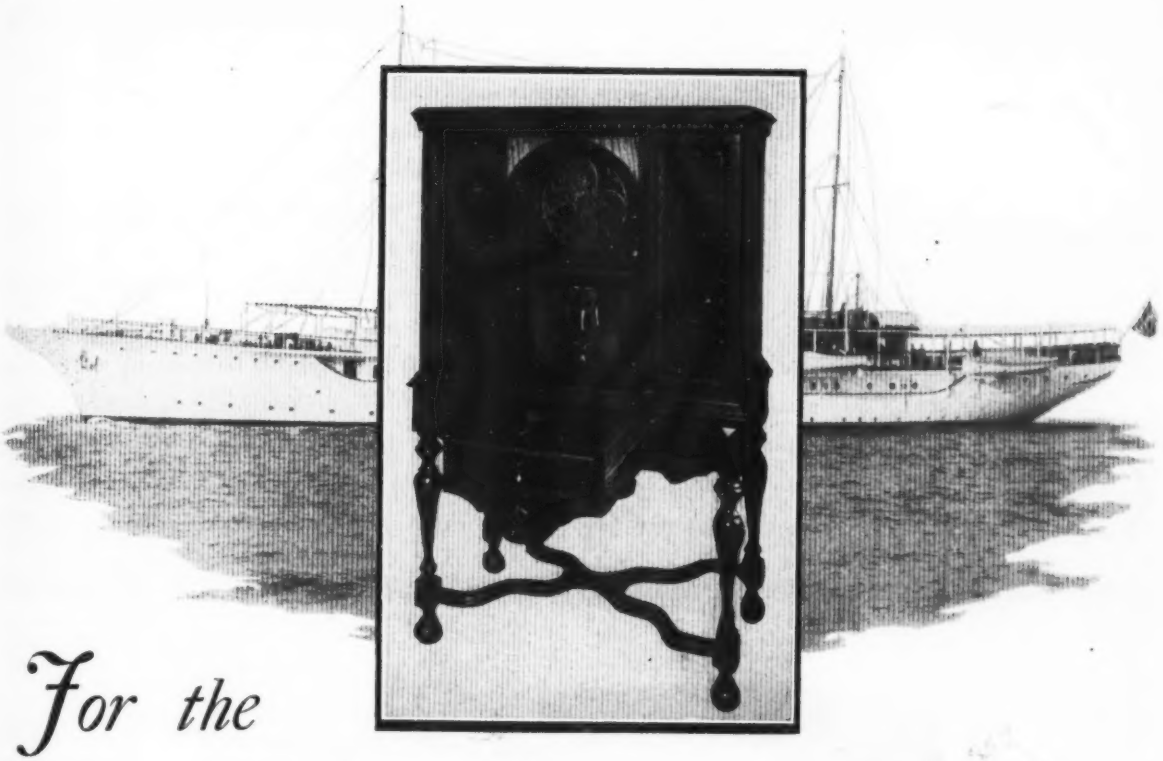
CARIBBEAN BLUE

(*Continued from page 88*)

We left San Felipe at 9:32 A.M. and reached the eastern end of the Golfete at 12:58. While John steered I wrote up the log of Stella and made notes for a report to the Museum in New York. I was very well satisfied with the trip. There is no doubt that future exploration in detail of the piece of Guatemala between the Golfete and the Sarstoon will prove very profitable. There is no doubt in my mind that there were once trade routes of a good deal of importance which followed both the Sarstoon and the Golfete. We Americans are apt to forget that until the railroad was built from Puerto Barrios to the capital, the city of Guatemala was reached by using the Rio Dulce—Golfete—Lake Izabal—Rio Panzos water route which gave cargo a penetration of nearly eighty miles into Guatemala before it had to be transferred to mule back. Of course the ancient Mayas used this route before the Spaniards did. But for goods destined for Mexico and other points in North America which had come from South America, I am convinced that the Sarstoon route was the better, because the carry overland from the Sarstoon to the rivers flowing into the Gulf of Mexico is considerably shorter and over less hilly ground than it would be from the head of Lake Izabal to the same rivers.

It was six minutes past two as Stella nosed into the dock at Livingston. The little boat and her tiny motor had served me well over a trip of some three hundred miles, and I was sorry to say goodbye to them, and to good old John Devil. But one thing I was very glad to say goodbye to was my helmet. This helmet, purchased in New Orleans at an exorbitant figure, and which had proved not to be pith or cork at all but cardboard—and therefore a perfect sponge in every rainstorm—I now took from my head with great satisfaction and hurled into the Gulf of Honduras.

Advertising index will be found on 3rd last page



For the Finest Motor Craft or Residence

WHAT could complete the enjoyment of yachting more than a radio receiver of superb tonal quality and unlimited range, placing at your finger tips the music of the finest dance and symphony orchestras for the entertainment of you and your guests?

Such an instrument is the Seven Seas Console embodying the most advanced radio engineering principles and entirely enclosed in a beautiful walnut cabinet created by master craftsmen.

Seven Seas Console

Superlative reception, perfect reproduction, hair-line selectivity, maximum range without distortion, three shield grid tubes, 100% shielding, unit construction, single dial, push pull audio and dynamic speaker are only a few of the many superior features of this A-C nine tube receiver. The Seven Seas Console is also available with a complete electric phonograph.

Literature on Request

C. R. LEUTZ, Inc.

Altoona, Pa., U. S. A.

Cables: "Experinfo" New York

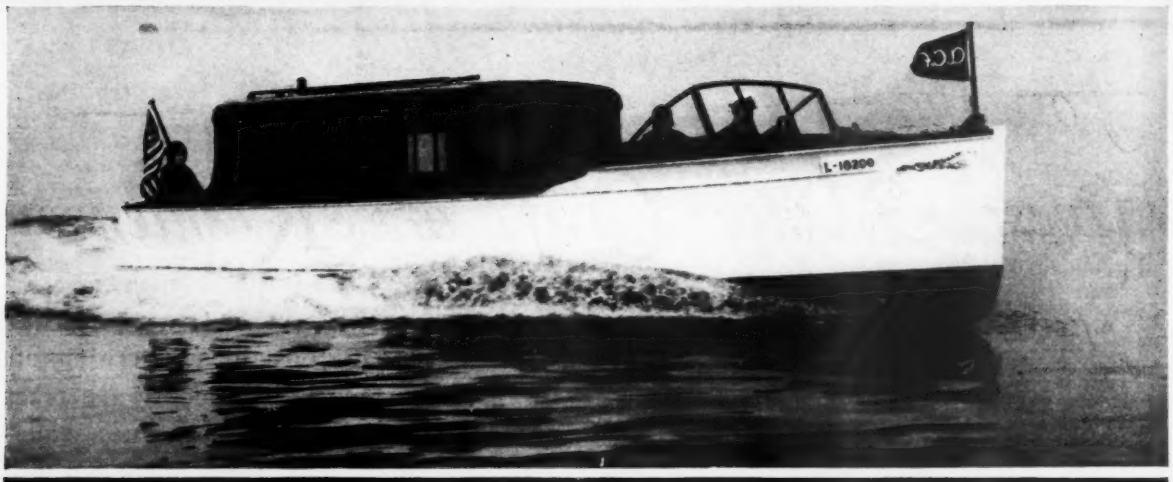
Sales Offices in New York, Los Angeles and Paris

a.c.f.

a.c.f. wants very much to welcome you at our display at the Show! There will be two new boats for you to go over—the 38′ Express Cruiser and the 30′ Cruiser Runabout. And of especial interest to you will be the first public announcement of the details of the new a.c.f. 46′ Cruiser . . . a new boat in every sense of the word!

You'll remember . . . without trying very hard . . . the stir caused by a.c.f.'s introduction of the cruiser runabout.

This new 30′ is an even better boat than that first one! It's little enough to manoeuvre in any crowded harbor, and big enough for friends and food and a mighty good time. It has cockpits for sun and sports, and a cabin in which nothing that makes for living comfort has been forgotten. There's a galley that sends out real meals, and everything in the world aboard when you set out . . . even to china, tableware . . . even to blankets. A new a.c.f. motor drives you ahead at 21 miles . . . or idles



Thirty foot Cruiser Runabout

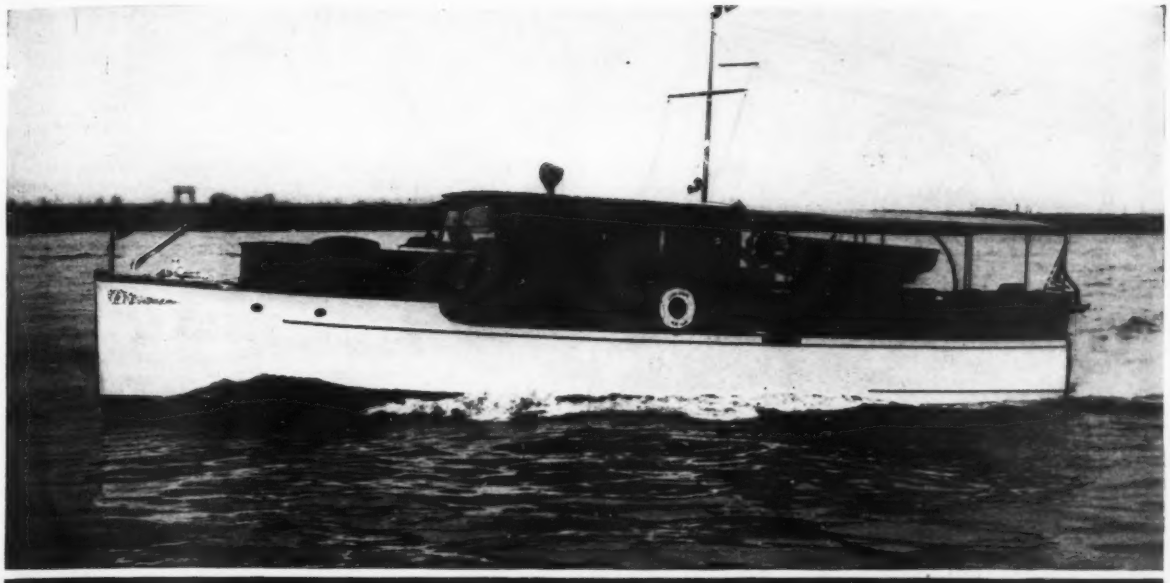
easily along, as smoothly as you could ask!

The new twin-screw 38′ Express Cruiser gives you an ideal combination of the speed and comfort in a cruiser in which every detail has been worked out to give you full enjoyment of every moment you spend aboard. It is a boat for play and for serious living—it has more than generous cockpit space and a roomy real galley. Its new 8 cylinder a.c.f. motors are perfectly synchronized to give you . . . hour after hour . . . 25 miles per hour of vibrationless travel.

The luxury of the finest custom built boat has been built into the a.c.f. 54′, but few custom built boats take the water as surely as this standardized cruiser. She is fitted with numberless little refinements that make her an extremely "liveable" boat—touches of fine woods in her decorations, a very roomy, complete galley, full size baths. Her two Hall-Scott engines turn out 20 miles per hour, an unusual speed for a

a.c.f.

Advertising index will be found on 3rd last page



Fifty-four foot Yacht, twin-screw

boat of her size.

Everyone of these boats is built by A.C.F. out of years of experience. You can trust them in the heaviest weather and in every emergency. Each is a thoroughbred. Each will give you the very utmost in boat value. That is A.C.F.'s promise to you!

Of course, we'll send details on any or all of them at your request. Won't you write today?

AMERICAN CAR AND FOUNDRY COMPANY

217 WEST 57th STREET • NEW YORK CITY

a.c.f.

Thirty-eight foot Express Cruiser

This Book—Our Gift to You!

The new Yachtsman's Guide is the only complete, up-to-the-minute yachting encyclopedia published. It contains 500 pages crowded with just the sort of practical information every motor-boat man wants. A copy of this invaluable volume should be aboard every boat and in the library of every yachtsman's home—on hand for immediate reference at all times. The following list gives you merely a partial glimpse of the wealth of material this book contains. Read it—then send for your copy at once!

- **All about engines—installation, ignition, vaporization and operation.**
- **Hundreds of helpful hints on outfitting and overhauling.**
- **More than 100 Motor Boatmen's Charts for the entire Atlantic Coast, Great Lakes and Canada.**
- **Marine Laws—Rules of the Road at Sea.**
- **What to do if the motor stops unexpectedly.**
- **Times of high and low water and direction and velocity of tides in all ports.**
- **Latitude and Longitude Tables, giving locations of over 1,000 points.**
- **All kinds of marine codes, flags, etc.**
- **Details of hundreds of cruise routes, description of ports and channels, marine signals, codes, flags, etc.**
- **Characteristics of lights, buoys, fog signals, etc.**
- **Numbering Law—How to obtain numbers for your boat.**
- **What to do in a storm—to prevent collisions.**
- **How to organize a yacht club—Constitutions and By-Laws and many other helpful features.**

Send for Your Gift Copy Today

"The Yachtsman's Guide" sells regularly for a good round sum, which we are willing to forget if you take advantage of this special offer of MoToR BoatinG for one year at $3.50 with "The Yachtsman's Guide" as a Gift. You would pay $5.00 for a year's single copies of MoToR BoatinG, anyway. So the book costs you nothing at all, and you save money on your subscription besides.

——————MAIL THE COUPON NOW——————

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57th Street at 8th Avenue, New York, N. Y.

I desire to take advantage of your Special Offer and get a copy of "The Yachtsman's Guide" as a gift, with my subscription to MoToR BoatinG for One Year at $3.50, saving me $1.50.

Name .....

Address .....

City..... **State**.....

(Remit now and an extra issue will be added to your subscription.)

Postage outside of U. S. and Canada $1.00 extra a year.

RADIO COMPASS FOR SMALL BOATS

(*Continued from page 34*)

miles or more, depending on the power of the transmitting beacon, thus enabling small craft in coast-wise navigation to take full advantage of the Radio Beacon Service in fog and thick weather, enabling small craft to avail themselves of an important aid to navigation, and to enjoy equal safety at sea with the larger ocean-going steamers.

A typical small Radio Compass is illustrated. The compass coil is formed by winding several turns of a single piece of special high frequency cable in grooves on the periphery of a cylindrical shaped bakelite frame 16 inches in diameter by 4 inches wide, the ends terminating at the receiver, by means of suitable collector rings, located directly under the coil pedestal. The winding is protected from injury by being covered with a similar shaped form, also made of bakelite.

The shaft on which the coil is mounted is connected to a hand wheel for rotating the compass coil while taking bearings. Directly under the hand wheel is a short pedestal to which a flat circular 360-degree scale is secured. This scale rotates with the compass coil under a fixed pointer in the form of a glass

The type of small craft now sharing radio compass protection with large vessels

window with an engraved sight line. The glass window is provided with a low candle power lamp for illuminating the scale under the sight line for use at night. Bearings are read directly from this scale. The zero degree mark must be kept turned towards the beacon on which bearings are taken. For convenience, so as to facilitate locating its position without reference to the engraved figures on the scale, the zero side of the coil is identified by a large white arrow painted on the upper casting of the coil support.

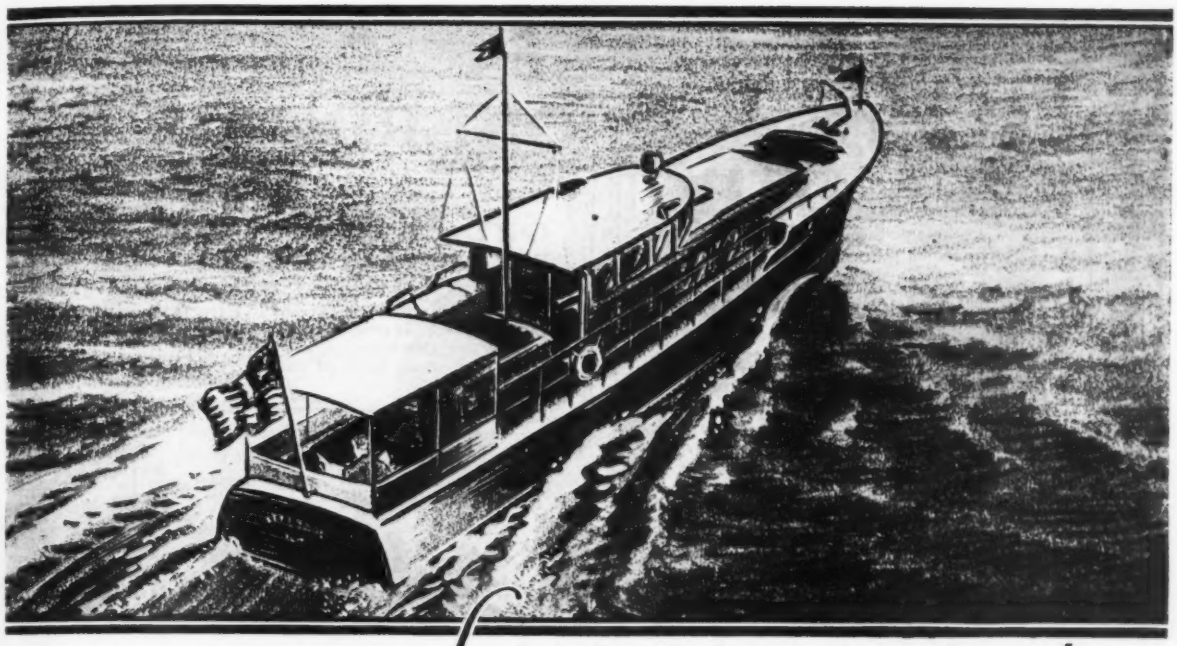
The compass coil described is for installations made in wooden cabins or deck-houses. In case the installation is to be made within steel wall cabins, it is necessary that the compass coil be installed in the open on the deck directly above the position chosen for the Radio Compass receiver cabinet.

As the compass coil is rotated, the characteristic signal from the Beacon Station will be heard in the head phones with a gradual varying degree of loudness until the plane of the coil is at right angles to the direction of the incoming waves, at which point the signal fades out entirely. This position of silence is very critical and sharp and, therefore, indicates with great accuracy the line of direction of the radio waves sent out from the Beacon Station. The bearing is then read directly from the calibrated scale on the degree mark which registers with the sight line engraved on the glass window. The manner of taking bearings with this type of Kolster Radio Compass is precisely the same as obtaining sights with the Pelorus on visible fixed objects. In both cases, the bearings obtained are with respect to the ship's head. By reference to the vessel's magnetic or gyro-compass, as the case may be, the position of the ship may be plotted by simple triangulation.

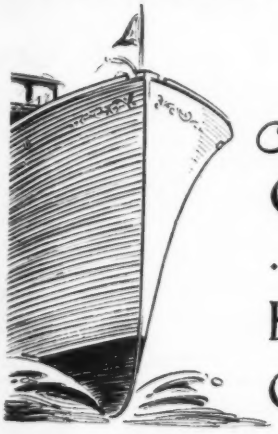
The receiver is located directly beneath the compass coil, hand-wheel and calibrated scale, as can be seen. Tuning is accomplished by a one dial control identified on the photograph. The receiver employs six tubes, large type, so operated that they

(*Continued on page 100*)

Advertising index will be found on 3rd last page



means LUDERSHIP / LEADERSHIP!

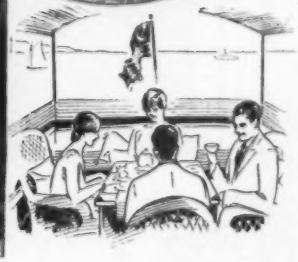


A Great Commuter . . . . . an Equally Great Cruiser!

THE Luders "72"—72 feet of all that is modern and of proven excellence in yacht design—fashioned for luxurious comfort and constructed for year upon year of practical service.

A representative Ludership which means swift, vibrationless water commutation for the man who would capitalize upon such a high degree of service. And at the same time a cruiser with adequate proportions for the family to enjoy in perfect safety a wide cruising range, healthful recreation and delightful entertainment. To the active executive or retired business man the Luders "72" represents an investment which pays gratifying dividends. Specifications sent upon request. Arrangements made for your inspection of this or other Luderships now in service or in course of construction.

Address
LUDERS MARINE CONSTRUCTION COMPANY,
Stamford,
Connecticut.



KEEP DRY AND WARM IN A

"UTE"

The All-Weather Utility Suit

(Patent Pending)

For YACHTING, MOTOR BOATING and OUTBOARDS

One-piece Waterproof and Windproof of double texture cloth with rubber vulcanized in between. Famous Rustproof Hookless Talon Fastener at front and sides of legs. Waterproof elastic at wrist, ankles and waist. Small spat to cover shoe. Easily put on — weighs but 36 oz. Detachable Hood.

Khaki Color—$12.50
White Color—$16.50

Come in and let us fit you to a UTE, or send us your check and measurements and we will ship you a UTE postpaid. Sizes—Small, Medium & Large. Extra Large 10% extra.

Live dealers should write for Willis' discounts

OBERDORFER PUMPS

OBERDORFER BACK FIRE TRAP
(Patents Applied For)

An Underwriters' approved safety device. It prevents fire caused by backfire explosions. Fits on air horn of carburetor.

For every marine use. Master and Improved Model "B" Automatic Electric Bilge Pumps; Hand Bilge Pumps; Motor Driven Pumps and Bronze Gear Circulating Pumps.

STURGES

STURGES

STURGES

New ? ? ?

Equipment

Besides the STURGES ANCHOR HOISTS and Outboard Motor Hoists we will display at our booth Nos. 77-82, third floor, Two New Devices manufactured by the *Sturges Anchor Hoist* which the motor boating public has long wanted. Don't fail to call on us and inspect them.

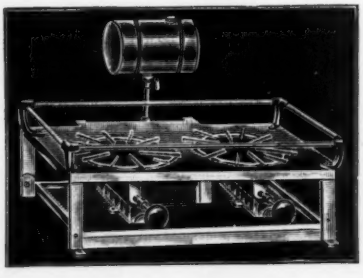
ELECTRICITY at Little Cost

Electric lights and other advantages of electricity hitherto restricted to large cruisers are now available to the small boat owner. The Midget Lighting Plant is a complete, independent generating set, gasolene driven, and designed for use with your present starting battery or any good storage battery. Weighs only 50 pounds, and costs less than any other practical lighting plant.
6-volt $140. 12-volt system $145.

The BRANFORD "Midget" Lighting Plant

"Wilco" Alcohol Stove

in Dark Blue Baked Enamel



Standard Equipment on A.C.F., Matthews, Chris-Craft, Richardson and other fine boats.

Height, overall 10¼ inches
Length, overall 20½ inches
Width, overall 15¾ inches

PRICE, $28.00

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LET WILLIS FILL YOUR ORDER FOR

SANDS Plumbing Fixtures

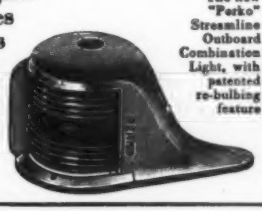
SANDS N.Y.

Standard equipment for fine boats everywhere — nothing better is obtainable. We have on hand for immediate delivery a large stock of the most popular Sands Closets, Lavatories, Pumps, Etc. Come in and see how reasonably they are priced.

PERKO PRODUCTS

A few of the many specialties that have made "Perko" a guarantee of superior service and up-to-date design:

Bells
Buoys
Whistles
Ventilators
Dome Lights
Marine Hardware
Electric Pole Lights
Mahogany Flag Poles
Bilge Pumps and Galley Pumps
Outboard & Inboard Equipment
Deck Sockets and Plugs
Searchlights
Specialties
Binnacles
Lighting Fixtures
Running Lights
Bronze Lights



The new "Perko" Streamline Outboard Combination Light, with patented re-bulbing feature

Ask your Boat Builder what HE thinks of

Kirby Paints

He knows that they are the lowest priced reliable paints obtainable.

Copper Bottom Paints, Flat Yacht White, Gloss Warship Gray, Gloss Deck Paints, and Holland Enamel always in stock.

Famous with Three Generations of Yachtsmen

GUARD AGAINST FIRES AND EXPLOSIONS

by installing the

"WILCO"

Ventilating System

Expels dangerous, nauseating gasolene vapor from engine room and bilge, and keeps the galley and cabins cool and sweet.

Requires little current, and can be mounted through deck, or cabin top.

Write for descriptive circular

KAPO Safety Coat

Made especially for the motor boat trade and wherever a life preserver is required that will fit snugly to the body, permitting a coat to be worn over it. Made in four sizes; cover is khaki, strongly sewed and well finished. Filling is kapok, a silky downy vegetable fibre of exceptional life and resiliency, absolutely non-absorbent and its buoyance is 25 to 1 or six times greater than cork.

Size Nos.	Chest, Inches	Each
1	24 to 30	$6.00
2	32 to 36	6.50
3	38 to 42	7.00
4	44 to 48	8.00

MAXIM SILENCERS FOR EVERY MARINE SERVICE

507241A

THE
BEST OF
BOATS
ARE MADE BETTER WITH
PLASTIC WOOD

During 1929 Chris-Craft motor boats again proved their all-around superiority in practically every important regatta at home and abroad. Their performance record is indeed an enviable one.

CHRIS SMITH & SONS BOAT CO.
Manufacturers of
CHRIS-CRAFT

In covering countersunk screws, as on the bottom of boats, where the smoothest possible finish is desired, Plastic Wood is regularly used on Chris-Craft. It permits a sanded finish which fills the hole as if Plastic Wood were a part of the mahogany itself.

Plastic Wood is not only an important construction unit in fine boat building but serves for every boat owner as a quick, permanent repair in minor damages. Keep a can aboard.

PLASTIC WOOD
Reg. U.S. Pat. Off.
At Ship Chandlers, Hardware and Paint Stores
Our Engineering Department will gladly answer any specific questions as to the adaptability or use of Plastic Wood in Boat Repair or Construction.
Send for free 24-page booklet on Plastic Wood for Boat Repair and Construction
ADDISON-LESLIE CO., 26 Bolivar St., Canton, Mass.

RADIO COMPASS FOR SMALL BOATS

(*Continued from page 96*)

are equavalent to three stages of radio frequency amplification, a detector and two stages of audio frequency amplification. This receiver is designed to cover a wavelength range of approximately 550 to 1050 meters.

The A and B batteries for the filament and plate supply, respectively, are located in a neat wooden battery box and connections made to the receiver with lead-covered cable. The battery box also contains a charging resistor connected to the ship's mains for charging the A battery. A double pole double throw snap switch is conveniently located within the box, by means of which the battery may be connected to either the receiver or charging circuit.

ENGLISH CHANNEL RECORD BROKEN AGAIN

(*Continued from page 48*)

had lived for months was at last coming true." Watchers on shore saw only a cloud of flying spray as she disappeared to the east.

She dodged driftwood, steered by small obstructions, and in just 37 minutes she was entering the French Harbor of Calais. Think of that! There officials awaited her, and as she circled the stand they checked in her time, and she started back. It was a wonderful thing that she had done, going the entire distance without mishap of any sort, with motor running wide open. The Channel is a peculiarly rough body of water at best and with its treacherous tide a small boat is often thrown around mercilessly for no apparent reason. And when a boat traveling 40 miles per hour strikes a whirlpool of this kind "he impact is usually a hard one. A log, floating two-thirds under water, almost wrecked her once, as she dashed on. A quick flip of the wheel saved her just in the nick of time, however.

But 73½ minutes after she left Dover, Mrs. Victor Bruce was back again in her home harbor and her record being checked. She had done it. She had beat the existing world's record by a full 14 minutes! The crowd lining the shores of the bay went wild, to think that this record had been broken by another Englishman, and that a woman, too. "It was one of the most thrilling dashes I've ever made," she said, as the watchers crowded around her. "I took a compass with me, but did not refer to it once, as I was able to steer by landmarks on both sides." Truly the weather conditions were ideal.

Her boat, another standard American Chris-Craft with Kermath engine, had averaged over 38 miles per hour for this difficult crossing. Local authorities almost believed the feat impossible and had to await the cable from France, verifying her arrival before they could believe that she had gone all the way across. Truly, they said times have changed and things are not what they used to be. But, said they, it will be many a day before another crosses this channel and back in seventy minutes.

Mrs. Victor Bruce was radiant over her accomplishment, and her praise of legitimate motor boats was indeed satisfying. She had previously crossed this same channel in an outboard motor boat, and she said there was no comparison between the two modes of travel. "In the larger boat the crossing," she said, "was no more uncomfortable than a ride of similar length in a good car."

She enjoyed her record-breaking trip so much that, as she says, "In the future, when I want to cross the Channel, I shall use my speed boat in place of the Channel steamers, which are push-carts in comparison." And so again we see the triumph of the motor boats over an old foe, the sea. It makes us glad, and yet it should never make us grow careless. The inestimable power of the sea is not really known by most people until they have had an experience such as this. And one reason why this record was accomplished the way it was is because of the careful way in which Mrs. Bruce made her preparations for this feat. She left no stone unturned to insure a quick, safe crossing, before she ever got out on the water.

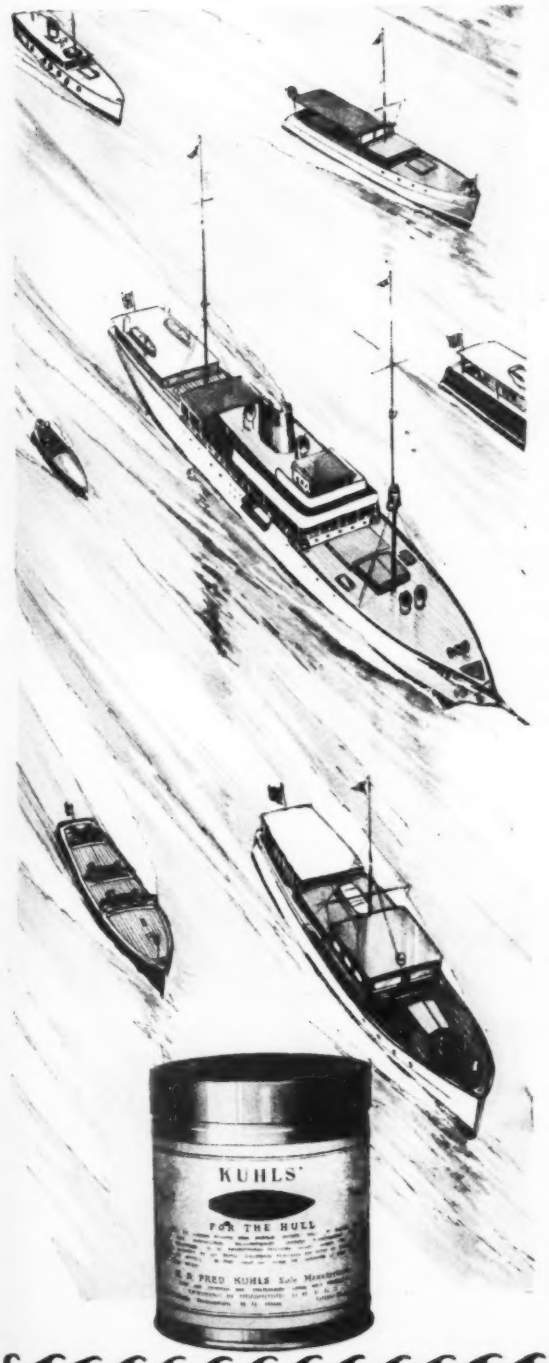
DART OPENS NEW YORK OFFICE

Following the recent announcement that Dart Boats, Inc., of Toledo, Ohio, planned to open a new factory branch in New York City, comes the information that they have selected offices in the National City Building, 17 East 42nd Street.

They will be represented there by H. O. J. Garlock, who has been appointed eastern manager of the Dart Boat Sales Corporation. Mr. Garlock was formerly associated with the firm of Garlock & Brewster of Bayshore, Long Island, and has established a nation-wide reputation for boat merchandising

Advertising index will be found on 3rd last page

Why do they ALL use KUHLS?



. . . . because these Elastic Compositions make tight seams that STAY tight *without recaulking* for many years!

LEADING naval architects, foremost ship builders—names famous in marine-dom for twenty-five years—specify and use only KUHLS ELASTIC SEAM COMPOSITIONS; such builders as Luders, Chris-Craft, Gar Wood, Matthews, A.C.F., Dodge, Sea Sled and many others.

KUHLS retains its elasticity indefinitely . . . never sets hard or brittle either above or below the water line . . . remains a tight joint always by becoming an actual part of the wood.

Five colors—white, gray, yellow, black and mahogany . . . one of which will harmonize with the finish of your boat.

Easier to apply . . . and once applied, a permanent protection. In thousands of definitely recorded cases, KUHLS Composition has lasted for ten years, fifteen years and even longer.

Write today for free sample can and literature. Orders will be filled and shipped the same day order is received.

No. 1 for Deck; No. 2 for Hull; No. 3 for Laying Canvas.

H·B·FRED KUHLS

Elastic Seam Compositions

65th Street and 3rd Avenue.....Brooklyn, N.Y.

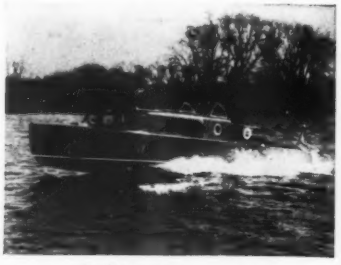
Over 80% of the WORLD'S LARGEST BOAT BUILDERS STANDARDIZE on KERMATH ENGINES . . . .

What greater tribute can be paid a marine engine builder than such a sweeping and conclusive indorsement of his product? Here is an acceptance that defies comparison—a deep-seated regard gained from experience. Space precludes the use of the hundreds of boat builders who today standardize on Kermath. Suffice it to say you will find Kermath acceptance world wide—In Sweden no less than in Japan, in England, Australia, South America, Italy, Germany, France, Switzerland, in Canada, New Zealand and from Coast to Coast in the United States. Over 80% of the world's leading boat builders are not only familiar with the performance of Kermath marine engines, but they stake their reputation on the recommendations they make for Kermath power. These men know Kermath motors provide the most dependable source of power and performance available. They are equally satisfied with the business integrity of the Kermath organization which makes for fair and friendly dealing.

KERMATH MFG. COMPANY

5879 COMMONWEALTH AVENUE, DETROIT, MICHIGAN
90 KING STREET W. TORONTO, ONTARIO

Hackercraft Speed Boats

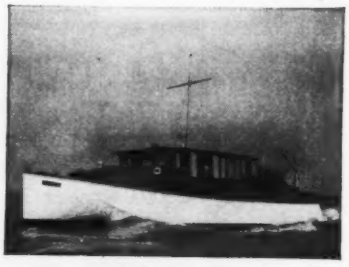


Robinson Commuters

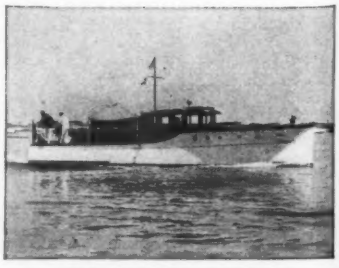
Huckins Cruisers

Gar Wood Runabouts

Chris-Craft Motor Boats



Matthews Cruisers



Fellows & Stewart Craft

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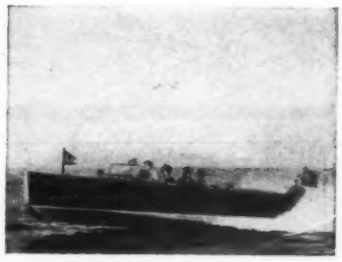
Ditchburn Runabouts

Staples-Johnson Cruisers



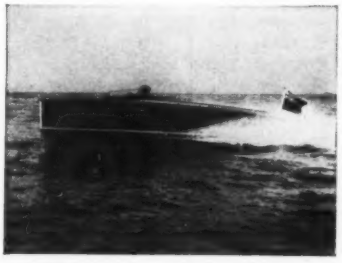
Sea Lyon Runabouts

Hubert S. Johnson Sea Skiffs

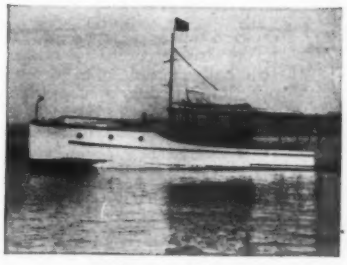
Marine Construction Co. Cruisers

Wheeler Sea Skiffs

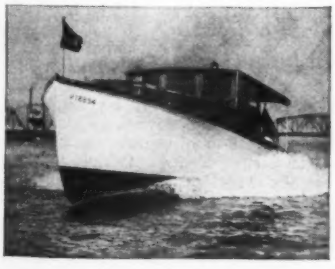
Dyer Motor Craft



S. E. Saunders, Ltd. Speed Craft



Blanchard Boats



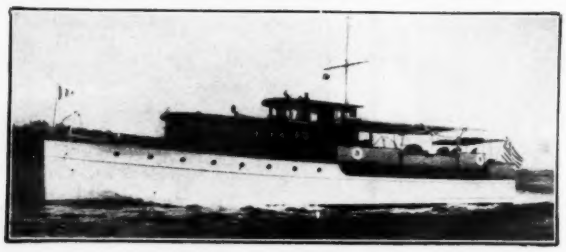
Liggett Cruisers

Fleetwing Cruisers

Banfield Sea Skiffs

Dart Runabouts

KERMATH
MARINE ENGINES



STANDARDIZED

yet

INDIVIDUALIZED!

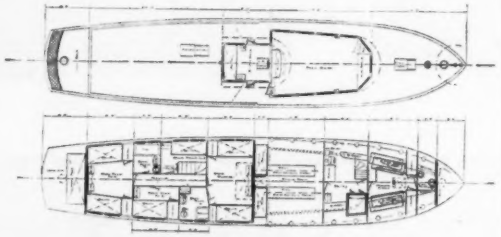
This beautiful **77-foot CRUISER** (16-foot Beam), built to the original owner's strict specifications, created such a tremendous impression, that we have standardized the model. However, it is still constructed in accordance with highest class practice in yacht designing and equipped to meet the customer's individual desires. It is, therefore, essentially a custom-built boat.

It is of rugged construction, double-planked hull, decks of teak, with houses of mahogany. It is absolutely seaworthy, dependable under all conditions, and has a beauty and grace of line that is irresistible. Powered with either **Gasoline** or **Diesel** Motor.

The owner's quarters consist of two double and two single staterooms, with two bathrooms. Combination dining and living room in the **large deck house.** Pilot house with Captain's stateroom adjoining. Galley, running full width of ship, with quarters forward for crew of four. Frigidaire ice machine. Decatur pressure water system. 110-volt electric generator, bilge pump and other up-to-the-minute appointments. Equipped with a 15-foot tender and 12-foot dinghy. Electric anchor windlass.

We have two of these Cruisers ready for Spring delivery. Order should be placed now to avoid delay. Write for complete details, interior views and prices.

We have been in business over **thirty years,** and have constructed, to individual specifications, some of the finest yachts seen in American waters. Our Custom-built Department is ready at all times to submit plans and specifications covering your individual ideas.



***The* NEW YORK**
Yacht, Launch & Engine Co.
Morris Heights, New York City
Tel. SEDgwick 4880

SWEDEN'S PLACE IN MOTOR BOATING

(*Continued from page* 41)

Ruben E. Ostlund, probably one of the cleverest boat designers in Europe, is the man who is responsible for having brought this type of craft to its present state of perfection.

One of his finest creations so far is a fast motor boat named *Svalan* (Swallow) which is capable of fifty-five miles per hour. It was built for Ivar Kreuger, who uses the boat for fast transportation between Stockholm and his summer villa in the outer archipelago. Svalan is far from being a pure-bred racer, being a huskily built 37½-footer, powered with a twelve-cylinder Wright Typhoon engine of 525 horsepower. The beam of the boat is 8½ feet and the displacement slightly over four tons, which indicates plainly that there was no intention in Svalan's construction of making her a purely racing type, but rather a sturdily-built serviceable boat, able to withstand heavy weather. In fact, the strength of construction has been a thought uppermost in mind in every portion of the boat. Fuel tanks with a capacity of 225 gallons are installed aft with a reserve tank of 53 gallons forward, providing a total fuel supply sufficient for a trip of 250 miles at a speed of 46 miles per hour. Equipment is complete and the accommodations are especially comfortable.

International

How the motorboat owners of Stockholm tie their boats along the shores of a canal

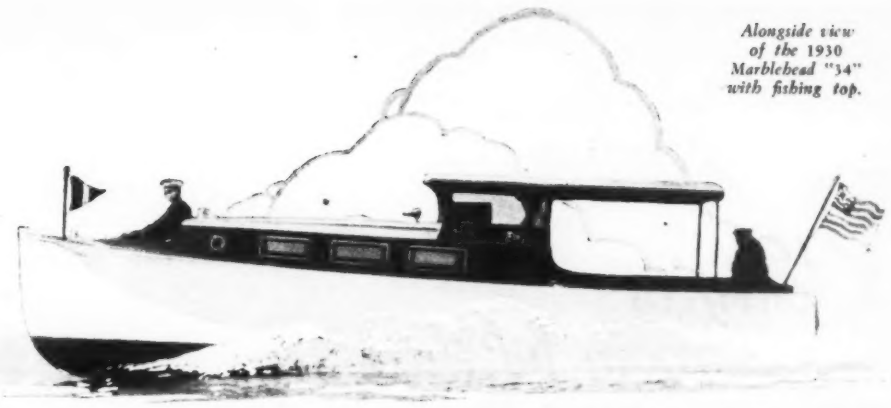
Among other noted designers are Carl Plym, C. G. Pettersson and the brothers Henning and Gideon Forslund. It was the last named who worked out the idea of the skerry cab. Mr. Plym specializes on the building of large cruisers and has delivered a fine sample of this type of Swedish boat construction to America. This is a sea-going motor cruiser, Selma, ordered by a Swedish-American industrialist, Mr. Jeppson, who intends to use the boat as a floating home off the Florida coast. The idea in the designer's mind when he started to lay out this boat was to arrive at a combination of the American ideas of practicability with the Swedish conception of seamanlike beauty and it is quite apparent that he has succeeded. Owing to the requirements of Florida service the draft was not allowed under any circumstances to exceed 3½ feet, so that regard both to seaworthiness and the utilization of space, forced the designer to develop the breadth in a manner hardly in line with traditional practice. Despite this side-wise expansion, however, Selma is a particularly graceful creation. She is 80 feet in length, slightly in excess of 16 feet beam and has a displacement of 41 tons. In spite of the great amount of machinery, two six-cylinder 180-horsepower Speedway engines and a 25-horsepower Universal as the electrical power plant, and all their incidental accessories, there is still plenty of elbow room in the small engine compartment and ample space to work there. Selma attains a speed of 16 or 17 miles an hour and is equipped with fuel capacity to provide a cruising radius of 575 miles, or approximately 30 hours of running.

Erik Akerlund, the Swedish magazine king, is the owner of the imposing motor cruiser Stella Marina, designed by C. G. Pettersson, and the racer Sea-Song. Mr. Pettersson specializes in the design of wholesome long distance cruisers, of which he has built a whole series, of the so-called Viking type. With one of them he himself made a remarkable voyage a few years ago, around the coast of Scandinavia, a sporting feat which earned him the gold plaque of the K. M. K.

In the marine engine industry there are Swedish motors of

(*Continued on page* 106)

Advertising index will be found on 3rd last page



Alongside view of the 1930 Marblehead "34" with fishing top.

The Story of a very unusual CRUISER

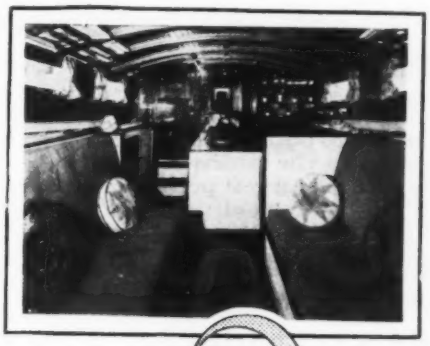
Bow view. Note forward cockpit.

THE new 34-foot Staples Johnson MARBLEHEAD is probably the most unusual cruiser now offered the boating public. A masterpiece of marine designing, she gives a perfect illusion of being many feet larger than she actually is. Her streamline hull seems to pull her length out to a good 40 feet and the cleverness of her planning actually does give far greater room, both above and below decks than any boat that comes within her dimensional class.

The after cockpit of this exceptional boat is amply large for six to eight people . . . even with a foursome duelling through a rubber of bridge. Two steps down discloses the most spacious cabin ever offered in a boat of this size—oversize berths for four—space for six to dine in comfort . . . and a six-footer can stand upright without risk.

The galley vies with the cabin for completeness and comfort. Everything you need plus plenty of elbow room. Fully equipped toilet and oceans of storage space complete the under-deck picture. An innovation is a forward cockpit for two persons with deep, soft-cushioned seats forming a watertight hatch when cockpit is not used.

Throughout only the finest materials are used. Constructed for year-after-year service by a crew of seasoned craftsmen. Tested and retested under all conditions of sea and speed. Every safety feature is incorporated. Every comfort idea used. Altogether the most remarkable boat of her type and priced considerably under the present market for 34-footers.



See the new Staples Johnson MARBLEHEAD "34" at the shows or write us for complete illustrated literature.

Also available in Double Cabin model having after-cabin which is an unbelievably roomy and comfortably large stateroom.

The New STAPLES JOHNSON "Marblehead"

STAPLES, JOHNSON & CO.
404 Pool Street
BIDDEFORD MAINE

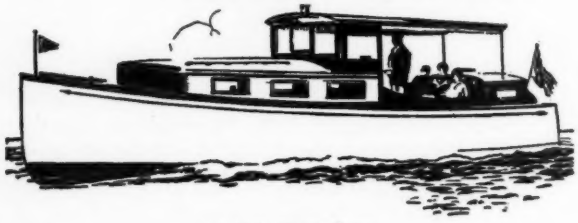
SALES AND SERVICE

N. Y. Boat Service Corp.
Clason Point
New York City

Savage Boat Co., Ltd.
585 Boylston Street
Boston, Mass.

IT COSTS LESS TO BUILD BETTER BOATS IN MAINE

Plenty of room for the Mrs. and Kiddies on this Cruiser!



$4,185.00 at plant

WHY be slave to congested roads when a smart craft gives you command of open water and the freedom of unfettered movement?

Get yourself a boat—a smart one that will show a clean pair of heels to the worst of city life—a staunch cruiser that will carry you and your family to ports of new adventure. Come down to the Bruns-Kimball Anchorage—New York's largest permanent marine exhibition. Select a craft to satisfy your wishes and fit your pocketbook.

Deferred payments if you desire.

Open evenings by appointment.

MATTHEWS CRUISERS
38 ft. and 46 ft.—$6850 and up

RICHARDSON CRUISERS
Single and Double Cabin
$3585 Single—$4185 Double

HACKER RUNABOUTS
24 ft. to 38 ft.—$3150 and up

STERLING ENGINES
12 to 565 H.P.

KERMATH ENGINES
3 to 200 H.P.

Guaranteed Rebuilt Engines
All Makes—All Sizes

The Bruns Kimball Anchorage

BRUNS, KIMBALL & CO., Inc.
FIFTH AVENUE, Corner 15th St., NEW YORK
Telephone Algonquin 0800

WHERE TO KEEP ONE'S BOAT

(*Continued from page* 38)

are to be provided with fire doors so designed that in case of fire they will drop down with edges below the water line. This, of course, will provide a cutoff against the possible spread of burning gasoline. Fire hose and risers will be provided at locations about every 62 feet along the central corridor. As an additional fire safety factor, corridors will be divided off by fire doors at intervals and each divisional unit will be provided with a ventilator arrangement.

The matter of convenience has been given no little consideration, and it is planned to provide an oil and gasoline dispensing station at the harbor line when the contemplated cabin cruiser wells are completed.

This item of convenience is an interesting adjunct to yacht basin construction in a number of ways. In Chicago, for instance, it is possible for occupants of the basin to have their craft connected with the city phone and power lines while at anchor. This service is provided by means of specially constructed service outlets. While in port, the ship owner is able to operate his refrigerator, have his cabins vacuum cleaned and do this, that or the other thing which the use of electrical apparatus permits—all without taxing his own ship's power plant.

It is obvious that the two structural systems briefly described are not cure-alls for the yacht basin problem generally. Natural conditions of the site are the most important factors dictating the design and the total sum of money which may reasonably be expended in building the basin. Illustrative of this point is the fact that varying conditions of tide will positvely determne what practices must be followed in construction at seacoast points. Floats and other items of a similar nature would naturally have to be included in the expense budget. Generally speaking, however, the cost of construction and operation can be kept sufficiently low if the problem is given some forethought.

The municipal yacht basin may be either simple or pretentious depending on the necessity for its construction, the number and type of craft to use it and the funds available. Whatever its type or size the moral to be observed is that permanent construction is the most economical construction. The yacht basin is not for this season or next season only—it must be of service for years if it is to justify its construction. Properly built, it will provide a welcome spot, in which the modern Noah may anchor for many decades.

SWEDEN'S PLACE IN MOTOR BOATING

(*Continued from page* 104)

many makes, various types, and designed for different purposes. Among them might be mentioned Bolinder's crude oil engine and the Archimedes, Penta, Skandia and Albin petrol motors. Of late the designers of the Archimedes and Penta have applied themselves to the development of racing engines for outboard boats and have succeeded in producing some very interesting types which are expected during the coming season to raise considerably the speeds in competition.

With the encouragement of the K. M. K., motor boat competitions have developed remarkably and the club has promoted many long distance night runs which are unusually exacting with regard to navigation in Stockholm's extensive archipelago with its many shallow and devious channels. In racing competition the Ostlund- designed Sea-Song has been supreme for a number of years. This year, however, there are one or two fast new flyers under construction which are expected to dispute Sea-Song's place as the fastest boat on Swedish racing waters.

As part of its activities the Royal Motor Boat Club has arranged a great exhibition, one of the biggest events of the season in Swedish motor boating. All novelties connected with this sport, boats, engines and accessories will be on display for the first time with exhibits by foreign as well as Swedish manufacturers.

SEGRAVE PLANS 120-MILER

In his designs to regain for England the coveted International Motor Boat Trophy which the United States has held since 1918, Sir Henry Segrave, the world's automobile speed champion, is laying plans for a new craft which will be designed to make a speed of two miles a minutes. The new racer is to be christened Miss England II and will be equipped with two Rolls-Royce Schneider Trophy airplane engines developing together a total of 4,000 horsepower. This will be far in excess of any power ever installed in a craft of its size and type. She is to be 38 feet in length with a nine-foot beam and the new boat will be ready in May. British speed boat enthusiasts have already expended a million and a quarter dollars in their attempts to recover the International Trophy.

Advertising index will be found on 3rd last page

Coming!

A NEW marine engine by Chrysler—designed particularly for use in small high-speed runabouts—distinguished by novel features of design and sensational performance ability—maintaining every tradition of Chrysler quality—and destined to parallel the success already won by its companion engines, the famous Imperial and Royal. Watch for announcement in the next issue of this publication.

Chrysler MARINE ENGINES

CHRYSLER MOTORS PRODUCT

AT THE NEW YORK SHOW

Your first glance at the new NORTH STAR mahogany runabout will reveal to you that here at last is a boat which is *different*. Every part and every line suggest advancement — leadership — distinction. Its fittings resemble fine table silver rather than ordinary boat hardware. It is a boat you will look at twice—come back to see again; and eventually agree that aside from being the most generous value you have ever seen in a really fine runabout, it is a craft which simply is not duplicated in the whole large field.
Confer with us at our exhibit in Section "U", Mezzanine Floor, Grand Central Palace, Jan. 18th to 25th.

—And DEALERS — write today for our attractive proposition.

The eight-passenger NORTH STAR is literally a three thousand dollar runabout in reduced perspective — smaller in overall dimensions and more economical in price and upkeep; yet roomy, safe, and comfortable in the extreme. It is designed for the man who loves fine things, and every detail has been perfected for his convenience. Thus the most exacting yachtsman or business executive can have genuine pride in the ownership of a NORTH STAR — the fine cut gem of the boatbuilder's art.

The complete NORTH STAR *line includes dashing 40-mile speed tenders and custom designed express cruisers — each as distinctive as the* NORTH STAR *runabout itself.*

NORTH STAR

MARINE CONSTRUCTION CO.
HOLLAND, MICHIGAN, U. S. A.

THE CRY FOR PRODUCTION

(*Continued from page* 47)

article, although The Matthews Company are producing boats today at a hitherto unheard-of rate, none of the supreme quality, comfort, convenience and staunchness for which Matthews Cruisers have long been famous, has been sacrificed. And each finished boat retains a distinct individuality, instilled into it by that pride of workmanship which is constantly in the minds of the entre Matthews personnel. For Matthews Cruisers are really built in the Mattews plant, they are not merely assembled. Matthews has departments which very few other cruiser manufacturers can boast.

One of these is the sheet metal department, in which are made all of the tanks for gasoline and water and many other parts and fittings. Matthews even make their own galley stoves, buying no finished part save only the burners.

Another large space is used by the upholstery department, where berths, seat cushions, sail equipment and kindred gear are turned out. Every berth and every seat cushion on a Matthews Cruiser has built-in box springs, heavily padded with hair, felt and Kapok, compressed and finished with colorful materials which tend to enrich and enliven the cabins.

Spars are turned in another department, supervised by an elderly German workman the like of whom it would be hard to find. This man, one of the oldest, in point of service, in the entire Matthews plant, is immensely proud of the fact that he operates a lathe seventeen feet and two inches in length, and boastfully adds that it can be lengthened another five-feet—which is probably a record for a one-man lathe.

In the dinghy department, supervised by an extremely precise boat-maker, every bit of the work, even to the riveting, is done by hand. Each dinghy is equipped with three hackmatack knees, one in the bow and two in the stern. (This refinement of manufacture may seem unimportant to the average layman, but all true boatmen know what additional strength hackmatack knees mean to a small boat.) In spite of the fact that lumber for these must be brought from northern Maine or Nova Scotia, Matthews refuses to cheapen the product by the substitution of anything else, for these knees are another safety factor.

The machine shop is a busy place, machining the various castings and fittings. It is a large department because the Matthews people insist on knowing that every bit of a Matthews Cruiser is right, and, in consequence, do much of the machine work which might otherwise be farmed out.

An interesting story is told about how the present Matthews skeg, or propeller protector, was devised. Scott Matthews, cruising in Florida waters some years ago, accidentally backed onto a sand-bar, bending the skeg of his boat and damaging his propeller. Upon returning to Port Clinton he vowed to make a skeg which could not be bent nor broken under any normal conditions. This skeg is about ten times as strong as that usually found on cruisers of the same type and class. This piece of equipment, like countless others which go to make up a Matthews Cruiser, is strictly Matthews—patterned and machined entirely within the Matthews plant.

And so it goes, even down to the very smallest fittings, all of which are made of waterproof, rustless metals, prepared to defy weathers on any waters either salt or fresh.

In the Matthews plant, where efficiency measures could be put into effect without lessening quality, they were installed. But, if it was a question of saving time or money by skimping and paring, then the old methods, insuring highest quality, were adhered to. This company has ever believed, and harped upon it until it was thoroughly in the minds of all employees, that the safety, convenience and comfort of the boats' ultimate owners must always be considered paramount.

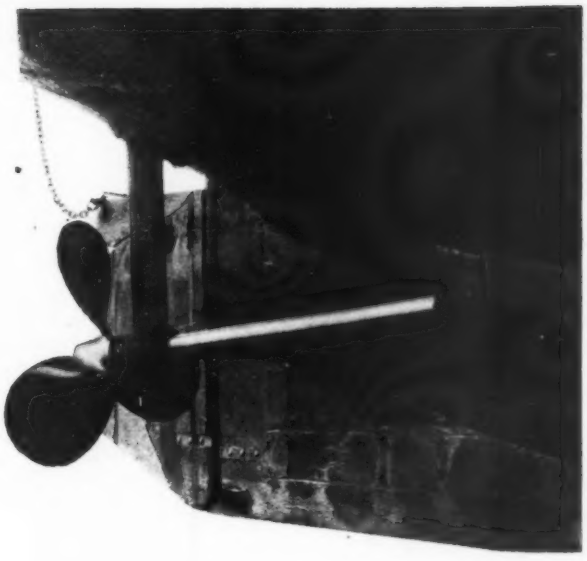
And so we find, in the plant of The Matthews Company, a sane answer to the imperious cry of Production! An answer that belies the theory that additional production must tend to lessen quality. An answer which refuses to believe that pride of workmanship is no longer a factor in the manufacturing world, for it permits the individuals composing the plant personnel to retain their individual characteristics and to produce boats of character and individuality. And yet it is an answer that satisfies the sales office by turning out cruisers in record time—cruisers so built that, once in the hands of their ultimate owners, they give years and years of remarkable service with an extremely low rate of depreciation.

After our trip through the plant we were standing on the dock in the rear of plant No. 1, watching a silver-thatched man and his family take over their newly purchased Matthews 38. The gentleman approached us. (He evidently thought that we also were taking delivery on a Matthews.) He waxed enthusiastic. "I'm from down east," he said, "where 'mass production' is the cry, and it certainly does me good to look over this wonderful plant and see one factory which hasn't allowed that cry to interfere with the quality of their product—a plant where the workmen are smiling, happy and proud."

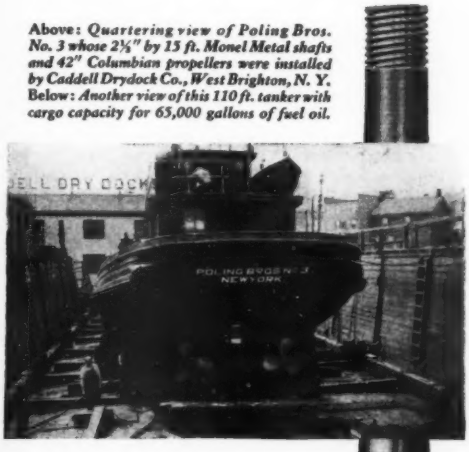
Advertising index will be found on 3rd last page

Monel Metal Shafts

show no wear in continuous heavy duty service



Here's a chance to get a close-up of Monel Metal's advantages



Above: *Quartering view of Poling Bros. No. 3 whose 2⅛" by 15 ft. Monel Metal shafts and 42" Columbian propellers were installed by Caddell Drydock Co., West Brighton, N. Y.* **Below:** *Another view of this 110 ft. tanker with cargo capacity for 65,000 gallons of fuel oil.*

THIS "clam's-eye" view of the Monel Metal shafts on Poling Bros. Tanker No. 3 shows that they have a smooth, unpitted surface after a year's continuous service under the most severe conditions.

Poling Bros. No. 3 is a hard-working commercial craft powered with two Atlas Imperial 70 h. p. engines, developing 8 knots per hour with a full load of 65,000 gallons of oil.

This tanker has been operating near Rockaway, N. Y. since February 1st, 1929... every day except Sunday... encountering quantities of sand in shallow waters.

In spite of this steady, severe service the two Monel Metal shafts show no signs of wear. Monel Metal's rare combination of properties is responsible for this dependable performance. Monel Metal is strong as steel... rigid, tough, resistant to the corrosive attack of salt water... resistant also to the abrasive influence of sand. Monel Metal takes a high polish in service which assures maximum life to bearings and packing.

Since a Monel Metal shaft successfully meets the severe requirements imposed by year-round commercial service, it will certainly give maximum dependability and economy in any pleasure craft or speed boat. Talk it over with your boat yard machinist. Or write direct for more information.

Monel Metal shafts increase the life of babbitt or bearing bronze and are especially recommended with Goodrich Cutless rubber bearings.

MONEL METAL

will be exhibited at the

SILVER ANNIVERSARY

National Motor Boat Show

NEW YORK

January 17-25, 1930

Monel Metal is a technically controlled Nickel-Copper alloy of high Nickel content. It is mined, smelted, refined, rolled and marketed solely by The International Nickel Company. The name "Monel Metal" is a registered trade mark.

MONEL METAL

THE INTERNATIONAL NICKEL COMPANY, INC., 67 WALL STREET, NEW YORK, N. Y.

Advertising index will be found on 3rd last page

AT THE SHOW

"90" Line

PARAGON
REVERSE GEARS

THE best engines have 'em. See for yourself. Read the name plates on the gear handles of the biggest and finest engines. Then "Follow the Leader" —to greater success in 1930.

Look at Our New Absolutely Oil Tight Enclosed Models at Booths 21 and 22 Third Floor

PARAGON GEAR WORKS
600 Cushman Street, Taunton, Mass.

"There are no trick parts to a Paragon"

MISTER SIMMS, A HUSKY CRUISER

(*Continued from page* 51)

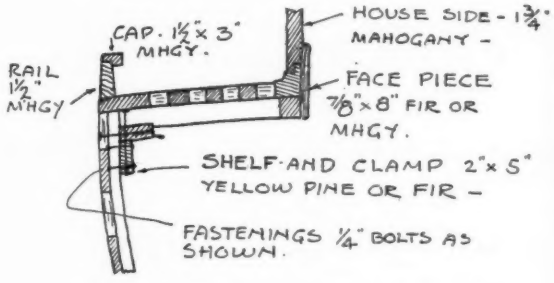
boat which ever kind of fastening is used. The heads will be countersunk and plugged with wood.

Caulking should be cotton and do not drive this in too hard. If the planks are nicely fitted showing just enough outgauge and have good tight seams inside, it is safe enough to roll cotton wicking into the seams after caulking the garboard and a seam or two above it.

After the floor beams and flooring is in the ceiling should be laid inside the hull. Along the bilge this will be made from 1⅜-inch fir for a width of about 15 inches, using lumber 3 inches wide. Above the bilge ceiling, and below, the frames should be ceiled with ⅞ by 3-inch fir, either having tongue and groove joints or square edges. The ceiling provides a finish for the inside of the hull and strength as well so must be well fastened. See Figure 4.

There is a bulkhead near station 8 which must be made water tight from the flooring to the hull. This should be made from ¾-inch cedar laid diagonally and doubled with light canvas between. This bulkhead will keep the oil and grease from the engine compartment from getting under the cabin flooring.

The engine beds are made from 3 by 5-inch white oak laid on


CAP. 1½" x 3" MHGY.
HOUSE SIDE - 1¾" MAHOGANY -
RAIL 1½" MHGY
FACE PIECE ⅞" x 8" FIR OR MHGY.
SHELF AND CLAMP 2" x 5" YELLOW PINE OR FIR -
FASTENINGS ¼" BOLTS AS SHOWN.

Figue 6, detail of the construction at the deck

the flat over the raised floor timbers as shown. Through bolts ⅝ inches in diameter should be used for fastening the beds to the floor timbers, and since the latter are well fastened to the frames and the planking the whole thing will be secure. I should run a rich mixture of concrete under the engine as outlined in Part 1 of this article.

The deck will be laid with 1¾ inch thick by 1½ inch wide white pine, seams to run either with the deck line or the center line. There will be a plankshеer made from yellow pine 1⅜ inches thick and 8 inches wide. This should be screw fastened to the edge of the top strake and to the deck beams. The seam along the plankshеer must be tight and laid in white lead or suitable Ferdico marine glue. The balance of the deck fastenings will be galvanized boat nails, heads let in and plugged. The seams must be caulked and then paid; afterwards being filled with Ferdico black seam glue. Cockpit will be finished the same as the deck.

The sides and ends of the cabin house will be made from 1¾-inch Indoako wood which can be gotten in long and wide dimensions. It will be fitted with a rabbet to match the base piece as shown in the sketch, Figure 6. Use for fastenings long rods extending from top and through the base piece and deck carling. Five rods each side should be enough. Then use 5-inch screws spaced on 8-inch centers between the rods. The screws will have to be let up several inches into the carlings. The ⅞ by 8-inch face piece which covers the seams along the base of the house also helps to fasten the sides to the deck.

The house top will be framed with 2 by 2-inch fir carling and covered with ⅞ by 3-inch tongue and groove white pine or fir. After planing and painting 10-ounce duck will be stretched over the top. This must be of sufficient width to turn down the side at least 2 inches. Cover the edge of the duck with 1¾-inch mahogany half round moulding.

Hatch covers, slide rails, cockpit coamings, cockpit staving, and all the other outside joiner work will be made from mahogany. The rail around the sheer will be made as shown in Figure 6, making the rail cap of mahogany to the form and dimensions given.

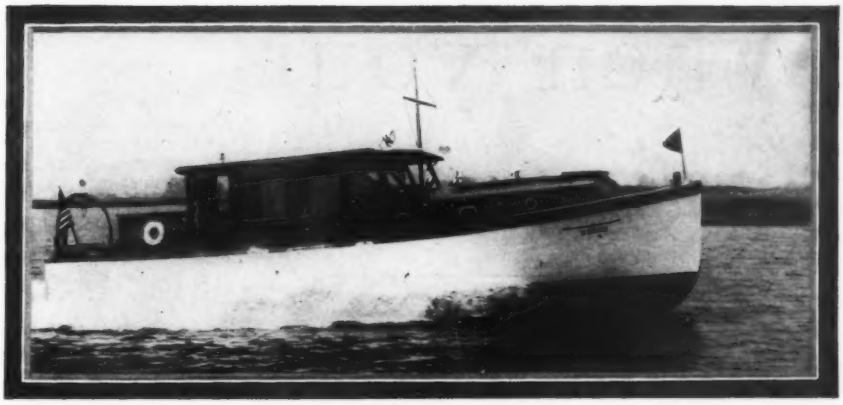
The rudder will be made from 2-inch yellow pine tapered aft so as to leave the water nicely. The several widths of yellow pine needed for making the rudder will be fastened with ½-inch galvanized rods. The head is stiffened by adding the cheek pieces as shown. The rudder will be hung on straps and pintles made from bronze and these must be heavy and well fastened.

(*Continued on page* 112)

Advertising index will be found on 3rd last page

36-foot Combination Sedan Cruiser

Available also in 33-foot, 40-foot and 47-foot models; single and twin screw. Full accommodations for six cruising. Most attractive prices.



The beautiful new

1930 WHEELER "PLAYMATES"

1930 MODELS

39'11"x11' —Single, Sedan and Double Cabin Models

36' x10' —Single, Sedan and Double Cabin Models

33' x 9'6"—Single and Double Cabin and Sport Models

29' x 9'3"—Single and Short Cabin and Sedan Models

26' x 8'2"—Single and Short Cabin and Sedan Models

22' x 7' —Sedan and Open Models

$1950.00 — $12,750.00

47' x12' —New, Custom design, Single and Twin Screw

Prices on Application

The 1930 WHEELER "PLAYMATES"—fifteen brand new models—represent the highest possible standards of marine craftsmanship. They are of striking beauty, sturdy construction and are luxuriously appointed. They combine tremendous power with incredible smoothness, and are guaranteed to completely satisfy the sportsman's demand for perfect performance and unmatched value. WHEELER ideals were never better exemplified than in these 1930 models. The models include special 22-foot Sedan, and prices range from $1,950.00 to $19,500.00.

Do not fail to visit

Playmate Harbor

(Booths A6 and E)

at the

New York Motor Boat Show

WRITE FOR NEW CATALOG "A"

WHEELER SHIPYARD

Foot Harway Avenue

Brooklyn, N. Y.

Tel. MAYflower 7600

WHEELER PLAYMATES

When your engine runs too hot—

—*or too cold*

you should know it immediately . . . . . .

THE MOTO METER name insures the accuracy and dependability of this instrument which enables the pilot to keep in constant touch with his engine. If it is running too hot or too cold he knows that something is wrong —and knows it in time to find out what that trouble is and correct it before it becomes serious.

Model "H" Dashboard Type

MOTO METER

with Motor Block Connection

Dial connected by capillary tube with bulb in motor block.

List Price $10.00 with 5 feet of capillary tubing. Additional length of tubing 25 cents per foot. Carried in stock with five, ten, fifteen and twenty-foot lengths. Both bezel and casing are nickel plated.

MOTO METER

GAUGE & EQUIPMENT CORPORATION

5 Wilbur Avenue Long Island City, N. Y.

MISTER JARVIS—A MASTERLY CRUISER

(*Continued from page* 52)

an opening through which water can flow off the deck. Rails like this are nice things to have, but cannot always be managed.

The forward deck is 7 feet 1 inch long, thus giving good room for working the anchors or making the mooring. A boat to be comfortable must have deck room at the ends and along both sides as well. Seems to me that a great many builders, and designers, too, must forget this, judging from the great numbers of boats that have wonderful accommodations below and in their cockpits, but none at all on deck.

The motor will be installed under the cockpit floor and should have a bore and stroke of approximately 5¾ inches by 6 inches turning about 1200 r.p.m. This will be about 100 h.p. There is a water tight bulkhead between the engine and the cabin; double ⅝ inch cedar laid diagonally and with light canvas duck between the layers. Fuel tanks of 75 gallons capacity each will be hung from the under side of the cockpit floor either side of the engine. These tanks will be 20 inches in diameter and 6 feet long.

Going below we find the galley on the starboard side. This is a roomy place fitted with all the things dear to the cook's heart. Three burner alcohol stove, large ice box, sink 18 by 12 inches, drain board, and a handy row of dish lockers along the after bulkhead. Under the sink there will be lockers, and under the table for the stove. Notice that the space from the face of the ice chest to the partition is 28 inches. The door on the galley means that it can be shut out of sight when in disorder.

There is a locker for fishing poles at one side of the companion steps and a locker 2 feet 8 inches long on the port side; the latter will be about 4 feet 8 inches high from the floor.

Then there is the toilet room fitted with Lee electric closet and wall basin. There is a shelf along the side of the ship under the deck. In fact there is ample room here for a few small lockers, of which there never can be enough on a cruising boat.

The main cabin is furnished with two man-sized berths. Water tanks are installed below these and will have a capacity of approximately 60 gallons. There are upper berths, which when not in use form backs for the lowers. There is a small buffet one end of the cabin. A drop leaf table is set up between the berths and even then there is planty of room to go forward. For those who crave lockers the forward end of the cabin will be a sort of little blue heaven, for it is piled full of lockers and storage room; 4 feet long and both sides of the boat.

Up under the forward deck there is a place for anchor chains, and if some hooks are put up on the bulkhead they will come in very handy for one thing or another. There never *is* enough room for everything on a boat.

The bulkheads should be made from ⅞ inch staving and not from plywood. Plywood is fine for light little boats but somehow is so out of place in a cruiser. It vibrates easily and contributes a lot toward magnifying noises. All the joiner work inside should be reasonably heavy.

Another month will all too soon roll around and then we shall continue the article on the building of Mister Jarvis, including with this the construction plans and a number of sketches showing details of boatbuilding of interest to builders, both amateur and professional. Blue prints from the original plans of Mister Jarvis to a scale of ½ inch to the foot are available at moderate cost. Write the Editor, MoToR BoatinG, 959 Eighth Avenue, New York, N. Y.

MISTER SIMMS, A HUSKY CRUISER

(*Continued from page* 110)

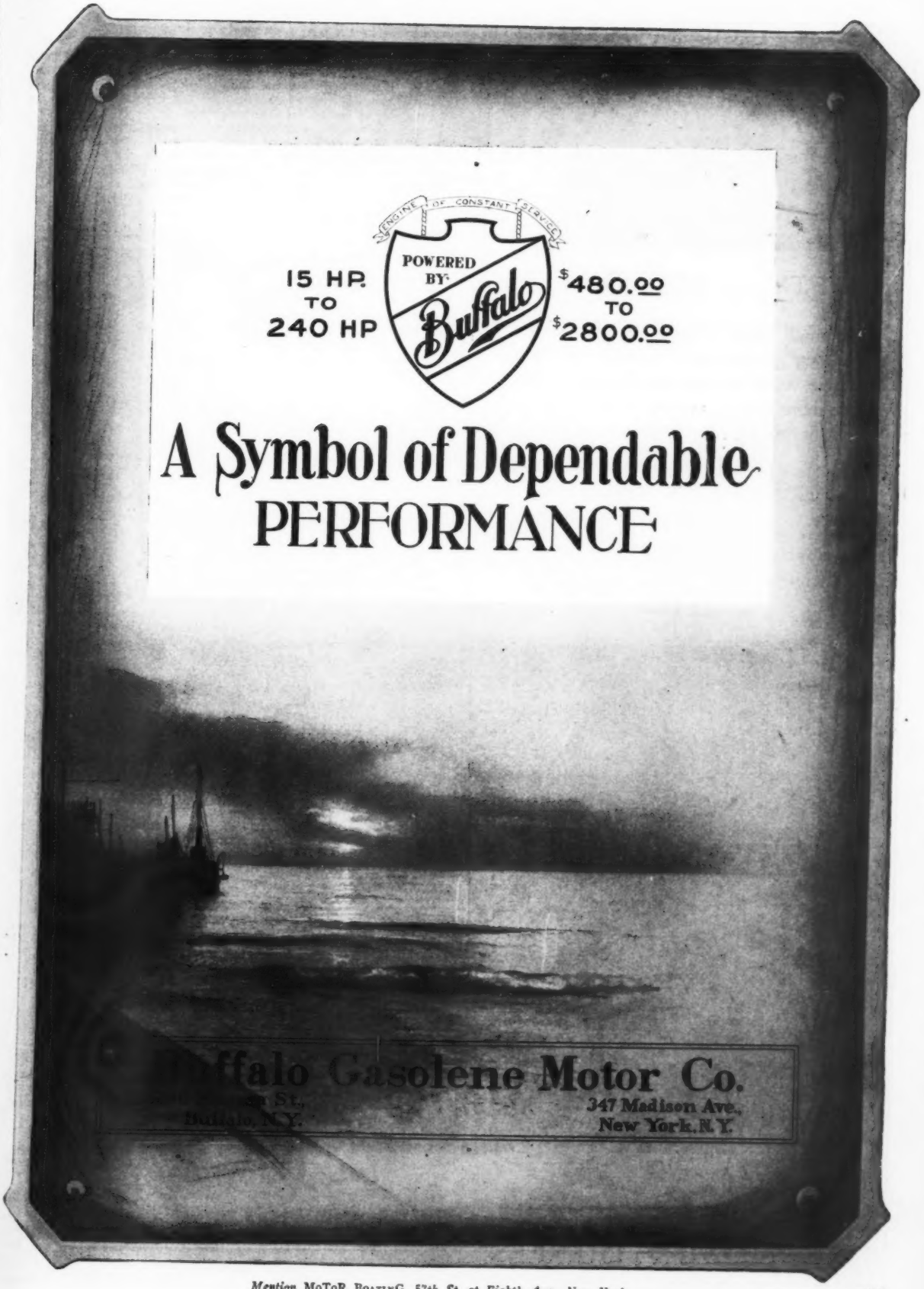
Complete details for making the curved stern transom are shown in Figure 3.

In building a boat of any kind it is best to work from the architect's original drawings and since the ½-inch scale plans of Mister Simms can be purchased for a moderate sum, it is suggested that intending builders write to the Editor, MoToR BoatinG, 959 Eighth Avenue, New York, N. Y., for particulars. Some books on boat building subjects will also prove useful.

GERMAN YACHT UNION ADOPTS INTERNATIONAL CLASS

Word has recently been received from Germany that the German Motor Yacht Union has definitely adopted the new five-and-a-half international class for 1930 and that several of the prominent boat builders are now making preparations to build boats to compete in this class. Some of these class boats, it is understood are to be powered with American engines built by the Scripps Motor Company of Detroit.

Advertising index will be found on 3rd last page


"ENGINE OF CONSTANT SERVICE"
POWERED BY
Buffalo
15 HP TO 240 HP
$480.00 TO $2800.00
A Symbol of Dependable PERFORMANCE
ffalo Gasolene Motor Co.
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Buffalo, N.Y.
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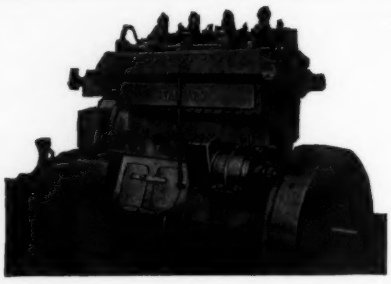
New York, N.Y.



SAFETY. . . . ECONOMY. . . .

No small Diesel is giving more. Many auxiliary yachts are powered with this engine, which occupies small space, weighs little more than a gasoline engine and increases cruising radius many times.

This type AE Diesel burns very cheap fuel oil of about 24 Gravity, costing but five to ten cents a gallon — and SAFE.

Obtain our price and full information. It will pay you.

WRITE

STANDARD
MOTOR CONSTRUCTION CO.

178 Whiton Street Jersey City, N. J.

"Queen Tyi" Has a 60 H. P. Diesel

STANDARD DIESELS

GOING OVER THE ENGINE

(*Continued from page 55*)

STARTING from the water up, the writer intends to replace an underwater exhaust with a modern, silencer-type marine muffler. Beside reducing the back-pressure and noise, this will eliminate risk of water leaks through the exhaust pipe and the surging, sputtering action in a heavy sea.

Crankshaft main and connecting rod bearings will need adjusting, as they have had no attention in two seasons or approximately 700 hours' service. These are of the shimless, bronze-and-babbitt 4-bolt type. The motor is a four-cylinder with 4 inch bore by 5-1/8 inch stroke. This work will require at least two days with no help aside from temporary assistance of two laborers in removing the motor to a boathouse bench or, if the weather is severe, into a truck for cartage to the home garage or basement. With the necessary files and scrapers and a few first-class forged socket and end-wrenches, the job should proceed smoothly.

Continuing upward from crankcase bottom and motor bearings, the reverse gear, which, in my craft, is almost in unit with the power plant, deserves a good inspection. This gear pulls well and with only a normal hum, but from about midsummer was rather hard to throw in and out. Apparently the collar yoke and its side bearings need adjusting and cleaning, with perhaps a new bushing or two.

The camshaft will probably be found O. K., as it has been quiet in operation, and there is only a normal faint clicking when the motor is spun over by hand or starter with spark plugs out. Timing gears have been so quiet that I expect they are of the fiber or compressed paper type. Just a glance to see that any cotterpins, lock washers, and eccentrics on them are O. K. will probably suffice. The oil pump has had a low clicking growl that has been increasing gradually, so it may need a new gear or two. Also a new strainer screen is generally worth-while.

Water jackets should be flushed out with clean, warm water and then given an injection of a good boiler cleanser, which will loosen nearly all scale and sludge.

The magneto is of a make famous for long life. It may require no more care than a good external cleaning, since it has been well-oiled and never tampered with. The carbureter, likewise, has given a good account of itself on both ordinary and ethyl gas, with infrequent adjustment, so the only improvement planned for it is a new gasket on the intake manifold flange to remedy occasional popping when cold.

Proceeding still farther upward from our water level start, the valves come next on this motor. They are of the ordinary cast-iron type. Four regrinds have been necessary in two years, and each time a great deal of hard carbon was found. They are to be replaced this winter with a new type silicon-chrome valve that has a special heat-treatment and excellent reputation. New valve springs and a precise setting of tappets are recommended.

Piston rings are doubtless in fair or good condition yet, as gas and oil economy are satisfactory, and no slapping or clicking from rings has developed. Wrist pins, also, will be treated on a well-enough alone basis, as there has been no knocking from them either after a long idle period or during a hard pull.

A new cylinder head gasket costing a few cents and new spark plugs at a few dollars pay for themselves in better performance on a two-year-old job. Wiring replacement will depend on how the old cables and terminals clean up. With a good-fitting breather cap and sturdy mounting, this motor has not splattered nor been splattered much.

If one removes his marine engine to his home shop, private garage, or elsewhere for this winter reconditioning, he should use extreme care in handling and bracing the job in a car or truck. I have seen both cylinder blocks and cases cracked or sprung in a run of only a few miles, and a four or six-cylinder job is liable to crash through the floorboard of an ordinary passenger car or less than one-ton truck.

D. McC., Cleveland, O.

FISHER YACHT TRIAL SUCCESSFUL

A short time ago the trial trip of Fred J. Fisher's new yacht, Nakhoda, was held on the Delaware River, proving to be entirely successful from every standpoint. The yacht ran without vibration at all speeds and developed a maximum of 16 knots, which was agreed to be a remarkable performance. She will be turned over to her owner on January 1 and will proceed immediately on an extended cruise to the West Indies.

Nakhoda is one of three identical craft which were designed by Cox & Stevens, Inc., in conjunction with John H. Wells for three automobile executives, one of the other two being designed for Alfred P. Sloan, Jr., president of General Motors. Nakhoda is powered with two 1100 h.p. Winton Diesel airless injection motors which functioned perfectly on the trial trip. She is 236 feet in overall length and 197 on the water line. Her beam is 34 feet and the draft 13. The Pusey & Jones Corporation of Wilmington, Delaware, were the builders.

Advertising index will be found on 3rd last page

See Our Beautiful Model Bath Room

AT THE MOTOR BOAT SHOW

Look for the Exhibit of

SANDS PLUMBING FIXTURES

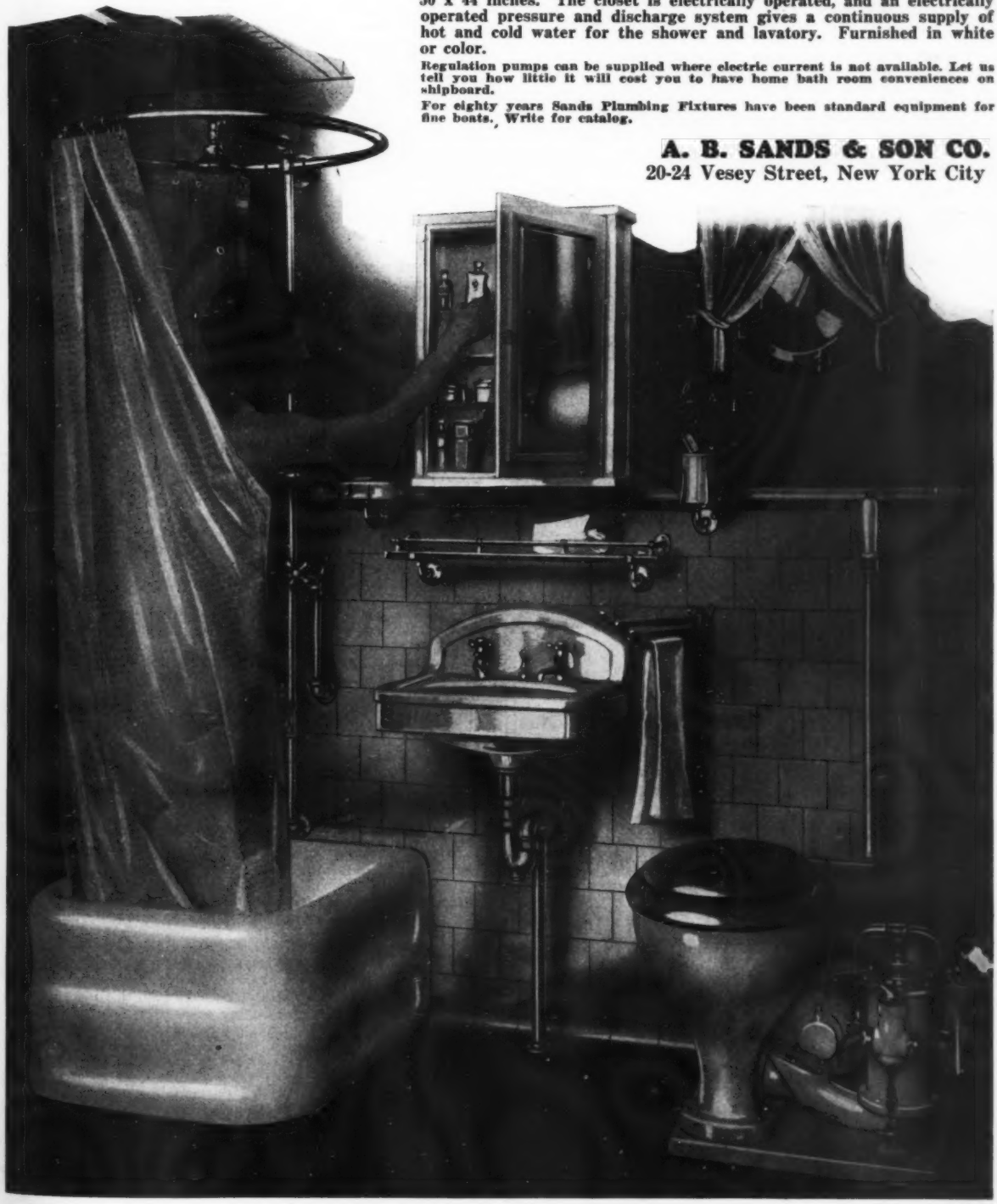
Booth No. 127—third floor

Your guests will expect your boat to have all the bath room conveniences of the modern home. The little bath room illustrated is just the thing for your new cruiser. Fixtures require minimum deck space of 50 x 44 inches. The closet is electrically operated, and an electrically operated pressure and discharge system gives a continuous supply of hot and cold water for the shower and lavatory. Furnished in white or color.

Regulation pumps can be supplied where electric current is not available. Let us tell you how little it will cost you to have home bath room conveniences on shipboard.

For eighty years Sands Plumbing Fixtures have been standard equipment for fine boats. Write for catalog.

A. B. SANDS & SON CO.
20-24 Vesey Street, New York City

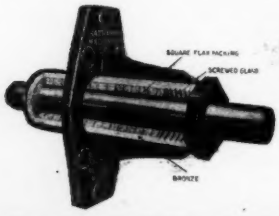


The Hathaway
RESILIENT
Flax Packed Stern Bearing

The Hathaway has every advantage that can be attributed to any other type of bearing—*PLUS* many important advantages, exclusive to the Hathaway.

Cushioned resilience—no vibration—no metal-to-metal pound—no metal contact—no friction—no wear—no loss of power; no possibility of sand grinding or scoring; no seizing or vulcanizing—overheating cannot harm bearing or shaft; no interruption of service for replacement or repacking—actual tests show one to five years' hard, steady service without repacking.

Install Hathaway Flax Packed Bearings this year and write *FINIS* to your bearing troubles and expense.



The Hathaway
Machinery Co.
New Bedford,
Mass.

IMPORTANT NOTICE

We have the honor to announce that Cliff S. Hadley, nationally known designer of speedboats, has consented to be at our Booths #87-88, during the entire period of the N. Y. Motor Boat Show, January 17-25, where he may be consulted on all motor boat problems, any day between the hours of 2 P.M. and 10 P.M.

As Mr. Hadley has been designing and building runabouts and hydroplanes for the past eighteen years, he is exceptionally well qualified to give expert advice.

He was the designer and builder of BUCKEYE II, winner of the cup given by President Machado of Cuba, at the Havana races, March 31, 1929; his hydroplanes won first, second, third and fourth place at the Albany races, July 4, and at the Red Bank races in August last, Hadley designed 'planes won first, second and third place in the Gold Cup 151 Class. In fact, Hadley craft are consistent winners.

This is an unusual opportunity which we offer you, free of charge, to secure expert advice on any of your boat problems.

Mr. Hadley may be consulted, during the Show, ONLY at OUR Booths 87-88, Third Floor, Grand Central Palace, Lexington Avenue and 46th Street, New York City.

INDIANA QUARTERED OAK CO.
222 East Ave. - - Long Island City, N. Y.
Philippine INDOAKO Wood — *"Best for Boats"*

THE MIRACLE WORKER IN MARINE ENGINES

(*Continued from page* 45)

A Chrysler reduction gear marine engine, 3⅝-inch bore and 5-inch stroke, weighing 1,100 pounds and operating at a speed of 2,400 r.p.m. will turn the screw 1,200 r.p.m., develop 100-brake horsepower and operate on .77 pounds of fuel per brake horsepower hour. The economy not only in fuel but also in propeller wheel efficiency is apparent.

Now, let's take a specific example: The owner of a schooner yacht, 65 feet overall, 18-foot beam, wished to replace the engine in his boat with one that would develop at least 80 horsepower. Possible engine space was limited to such an extent that a direct-drive engine capable of producing 80 horsepower at suitable r.p.m. would have been much too large. A Chrysler Imperial engine with two to one ratio reduction gear was installed and engine space actually remained unused. The owner now gets his 80 horsepower with its consequent greater speed and uses less fuel per horsepower.

On the Pacific Coast an owner had a twin-screw job 54 feet long, with 11-foot beam, powered by two 90 horsepower, 6 cylinder direct-drive engines weighing 2,000 pounds each. This engine, turning a 22x24 wheel, 900 r.p.m., made a speed of 12½ miles per hour. Two Chrysler reduction gear engines were installed and a 22x22 wheel was substituted. The screws revolving at 1,400 r.p.m. (half the revolutions of the engines due to a 2-1 gear reduction) were capable of sending the boat through the water at a speed of 16 miles per hour. Constant check of engines showed that they used 10 per cent less fuel, weighed half as much as the previous power plant, were much quieter and created far less vibration.

When one considers that a light, high-speed, gear reduction engine costs less to buy, weighs less, is quieter, more powerful, smoother and more efficient and costs less to fuel and keep in repair, one will understand why those who want more power in a given space and those who want a good boat, but have to consider the cost carefully, are lending a keen ear to the latest news on gear reduction—the common sense miracle work in motor boat engines.

JAMMED ELECTRIC STARTERS

(*Continued from page* 56)

THERE are several things that may cause the electric starter to jam and some of them are enumerated below and also a method for quickly releasing the starter when it does jam.

The spring may be broken or worn so that it will not perform properly and cause the jam. The helical screw may have a nick in it or be worn or not properly oiled. The starter motor bearings may be worn too much. All these can be quickly recognized and the remedy is obvious.

It may be that the starter is out of line due to repeated jams or a knock against it from the outside, or the bolts may not hold it properly upon its baseplate. The alignment may be a more serious thing to correct but by removing all housings to expose the pinion and ring gears, this work can be done. The gears should mesh parallel, of course, and there should be a little clearance all around, enough that a thin piece of paper can be slipped in freely. To do this, place a piece of paper on the ring gear and turn it under the pinion, crimping the paper. That portion of the paper between the meshing gears should be loose enough to be drawn out.

The gears may cause jamming themselves. The entering faces should be properly beveled and if there are any rough spots they should be filed down. If either of the gears are too badly worn or chewed up, they should be replaced. If the ring gear has been shrunk on the flywheel, it might have become loose or pushed out of its proper position. This should be checked.

After it has jammed, it is necessary to remove the starter or back it up and the gears will be free. This is quite a bit of work, however, and the following plan is used to overcome this tearing down process.

In the front face of the flywheel housing drill a hole in line with the starter shaft. This hole should be as large as possible and provided with a steel plate cover with felt gasket under to keep it oil tight. Several tap screws can hold this plate in place. By removing this cover, when the gears are jammed, a rod can be inserted and pressed against the pinion with sufficient force to push it back. Of course, care must be used to prevent the push rod from injuring the entering face of the pinion, but this is quite easy to overcome.

A properly aligned, well oiled starter will not jam if the parts are not worn, and when this trouble is a frequent one, a thorough investigation should be made by an expert, for it is very hard on the starting motor and the gears, to say nothing of the heavy current that is drawn from the battery by a stalled electric motor.

L. R. K., Philadelphia, Pa

Advertising index will be found on 3rd last page

Hall-Scott builds out of ALL the things that make good engines!

When do you enjoy your boat most? There's only one answer to that question . . . when it's under way!

And only a downright good engine can give you real pleasure then . . . an engine so dependable that you can trust it in the foulest of waters . . . so nicely balanced that it answers instantly any change you make in its controls.

Every Hall-Scott is exactly that sort of engine. Every one is built out of long experience, out of skill, out of the finest of tested materials . . . and, perhaps, most important of all, out of untiring efforts.

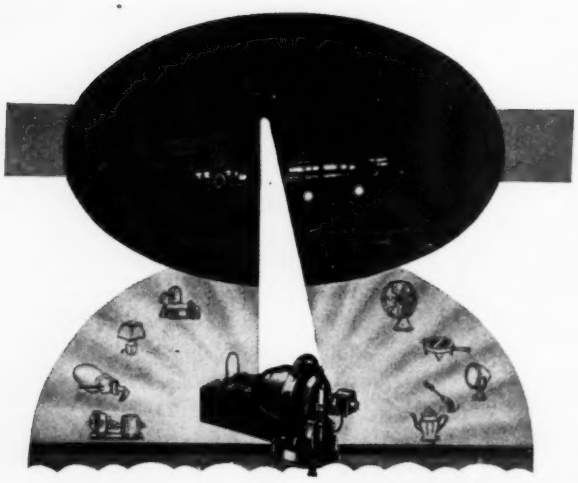
And that is the *only* way that fine engines can be built!

You will find the Hall-Scott engines at the displayrooms listed below. We will send you descriptive material of course, but you will enjoy them most if you can go over them yourself! Why don't you do it soon?

HALL-SCOTT
MARINE ENGINES

HALL-SCOTT MOTOR CAR COMPANY
Division of
American Car and Foundry Motors Co.
217 W. Fifty-Seventh St., New York, N. Y.

Berkeley, California—Seventh St. and Heinz Ave.... New York City—O. C. F. Salon, 217 W. 57th St. . . . Detroit—O. C. F. Salon, 500 East Jefferson Ave. . . . San Francisco, Cal.—S. C. Kyle, Rialto Building . . . Los Angeles, Cal.—210 East 10th Street . . . San Diego, Cal.—R. V. Morris & Company, 836 Columbia Ave. . . . Seattle, Wash.—902 Western Avenue . . . Portland, Oregon—344 Burnside St. . . . Vancouver, B. C.—Boeing Aircraft Co.



Electricity's Comforts for All Aboard . . .

Steaming food from electric grill, cooling breeze from electric fans, all the cheery light you want—juice to run bilge pump and anchor hoist—it's all yours in the Homelite Portable Generator with built-in air cooled gasoline engine. Stows in a space only 21" x 14" x 21". And the storage battery gives an emergency reserve of 2500 watt hours.

$275.00
F. O. B. Port Chester
Now write for description
HOMELITE CORPORATION
79 Riverdale Ave., Port Chester, N. Y.

4172

PELORUS

A PRECISION instrument for taking bearings of the sun, stars, or land objects, and for determining compass errors. Dial 4½ inches, graduated in degrees 0 to 360. $26.50

John Bliss & Co., Inc.
83 Pearl Street New York
Catalog mailed upon request.
Space 99—New York Motor Boat Show

YARD AND SHOP

(*Continued from page* 64)

The boat is equipped with a Decatur Pressure Water system, both salt and fresh. The battery will be an Exide. The refrigerator will be equipped with a Frigidaire ice machine. The cooking will be done on an electric range. One of the novel features of the boat is a third propeller which will be driven by an electric motor through a reduction gear; this is to be used while the yacht is in the shallow waters of Florida where Mr. Olds spends his winters.

The New York Yacht Launch & Engine Company will deliver this boat to Mr. Olds in the early spring and he will use it in the northern waters during the coming season and in Florida in the 1930 and 1931 winter season.

PERMANENT COMMITTEE MEETING OF INTERNATIONAL MOTOR YACHTING UNION

In an effort to formulate rules which will govern motor boat racing throughout the world, the annual meeting of the Permanent Committee of the International Motor Yachting Union was held at Brussels November 7, 8 and 9.

The foilowing countries were represented: Belgium, Holland, Sweden, Germany, England, France, Argentine, Italy and the United States.

The deliberations of the Union are held in French with an interpretation in English by the very capable and efficient Secretary Mon. Morris Pauwaert.

President A. Pierrard presided during the entire session and although his English is limited he was very patient in allowing the fullest time desired in the discusson of any queston in which the English speaking countries differed.

The President, who was formerly Minister of Marine of Belgium, gave a luncheon to the delegates at his home. The old paintings and furniture of another age gave a delightful background to the luncheon. His charming daughter, who was in England during the war, was hostess. Mon. Pierrard explained a particularly attractive vintage which he served had escaped the attention of the Germans during their occupation, for which we were all duly thankful.

All of the delegates were very much interested in learning of the racing events held in the United States during the past year, and much speculation was indulged in regarding the possibility of the British International Trophy being returned to Europe in 1930.

There were no radical changes made in the rules governing motor boats but the growing interest throughout the world in outboard racing came in for much discussion.

The delegate from the United States introduced a motion designed to establish a standardization of piston displacement sizes since at the present time the French manufacturers produce the A B & C Class of Outboard engines at about 10% greater size than the United States manufacture, thus resulting in an advantage of speed records of the same class.

The measure lost and cannot be taken up again until next year. However the D E and F Classes which had been practically unknown in European waters were adopted as closely as possible to the United States with slight variations. Emphasis was placed on the fact that records would not be recognized in Outboard Motor Races unless the motors were equipped with efficient silencers. The Rules of the American Outboard Racing Association were generally approved and with slight variations were adopted.

The Union does not look with favor upon the adoption of the statute mile in lieu of the nautical mile. It is their contention that the nautical mile is used all over the world where marine matters are concerned and is based on geographical measurements.

MEASURING CERTIFICATE. It was not deemed necessary to provide actual dimensions where secrets of construction might be exposed to which the owner might object, particularly in International Unlimited Classes.

STOCK MOTORS (OUTBOARD). Sweden and England objected to 25 motors having to be manufactured and delivered 60 days prior to a race before a motor could be defined as a Stock Motor. It was finally voted to use ten motors as a minimum. The English Rule is six motors (National Authority should have the right to investigate and certify that manufacturer has produced that many motors).

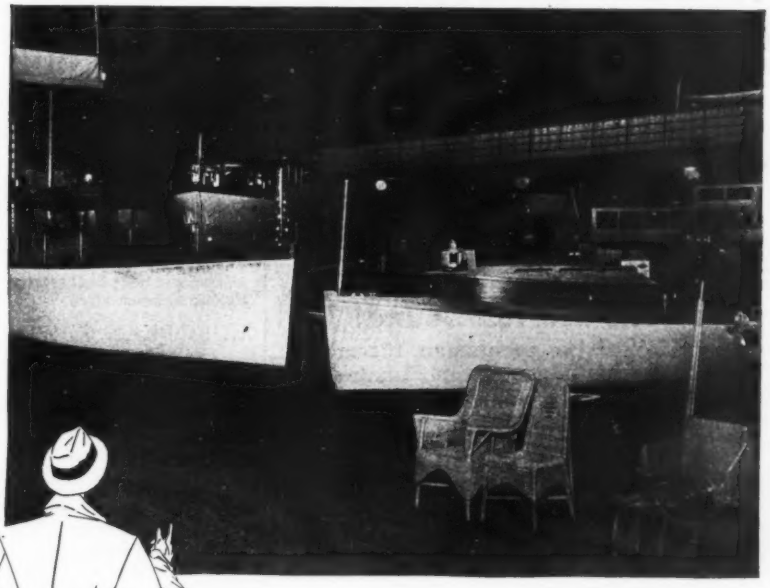
In the matter of the D E & F Outboard Motors the following was adopted:

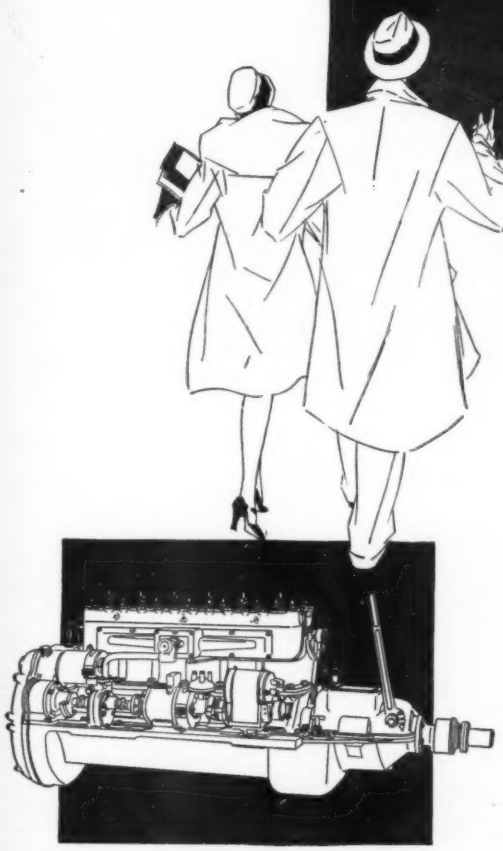
D 660 c.c. or about 40.3 cubic inches
E 820 c.c. or about 50 cubic inches
F 1000 c.c. or about 60 cubic inches

(*Continued on page* 120)

Advertising index will be found on 3rd last page

This Standardized Boat





with a Palmer Engine

At the Motor Boat Show you find the Standardized Boat that has been designed and built just for you. You see her in your mind's eye speeding along . . . you feel the breeze on your face . . .

Yes, she is the ship you want and you can be sure of satisfactory performance by specifying and insisting that she be equipped with a Palmer Engine and Clutch. The builder knows Palmer Engines, and will be glad to accept your choice.

For over thirty-five years Palmer Engines have been recognized as the acme of dependability, durability and economy in gasoline motors. The line includes the necessary type and size for every vessel. There is one that just fits the requirements of the boat you have selected.

PALMER BROS. ENGINES, Inc.
Cos Cob, Conn.

DISTRIBUTORS:

New York, N. Y.
80 Third Ave., between 12th and 13th Sts.

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Norfolk, Va.
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Seattle, Wash.
Pacific Marine Supply Co.

Vancouver, B. C.
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1008 North West 8th St. Road

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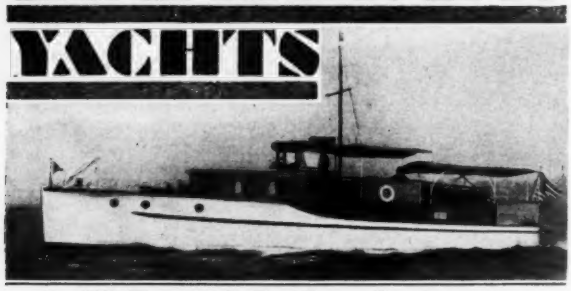
Kennedy Bros.

THE PALMER LINE

YT1—1-cylinder..	2 h.p.	F4—4-cylinder..	35 h.p.
PNR1—1-cylinder..	6 h.p.	F6—6-cylinder..	50 h.p.
PNR2—2-cylinder..	12 h.p.	NK2—2-cylinder..	25 h.p.
PNR3—3-cylinder..	18 h.p.	NK3—3-cylinder..	35 h.p.
PNR4—4-cylinder..	24 h.p.	NK4—4-cylinder..	50 h.p.
ZR1—1-cylinder..	7 h.p.	NK6—6-cylinder..	80 h.p.
ZR2—2-cylinder..	18 h.p.	Little Huskie—4-cylinder	15 h.p.
ZR3—3-cylinder..	30 h.p.	Power-Boy Six—6-cylinder	40 h.p.
ZR4—4-cylinder..	40 h.p.	P. A. L.—4-cylinder	25 h.p.
F2—2-cylinder..	18 h.p.	Lycoming Straight 8	115 h.p.
F3—3-cylinder..	25 h.p.		

Palmer Brothers Engines, Inc., are the retail distributors for Lycoming Marine Motors

LUERSSEN YACHTS



56 Feet of Cruiser Luxury
for Someone Florida-Bound!

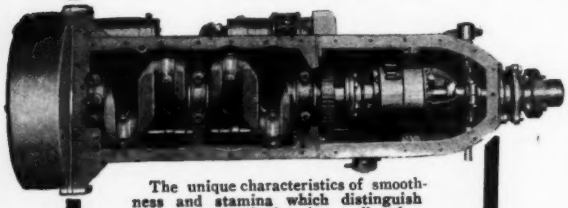
The more experienced the yachtsman, the more he will relish ownership of this luxurious 56-foot cruising yacht . . . 56 fleet feet of sea-going comfort. Powered with two 110 H.P. Maybach-Zeppelin Engines, she cuts thru even a heavy chop smoothly, effortlessly, speedily. One still available for Florida delivery . . . $32,500. An almost new yacht of this type—in commission only six weeks—available at strikingly reduced price.

F. W. von Meister, Gen'l Agent
578 Madison Avenue New York

MAYBACH LUERSSEN
motors yachts

There are reasons behind

"Falcon" Smoothness



The unique characteristics of smoothness and stamina which distinguish the "Falcon" Series from all other marine engines were not just a lucky break for the engineers of U. S. Motors.

They were the natural result of putting surplus strength where great strength is needed . . . of designing a crankshaft that balances *perfectly* in actual performance as well as on the blue print . . . and of using the quality of materials and workmanship that will suffer no apologies after years and years of hard service.

Whether you're a veteran boatsman, or just a novice, you'll find interesting information in any "Falcon" catalog. The same holds true with "U. S." Marine Lighting Plants.

United States Motors Corporation
2 Nebraska St., Oshkosh, Wisconsin

Falcon Series Catalogs

One Cyl.	5 H.P.	Catalog M-1
Two Cyl.	10 H.P.	Catalog M-1
Four Cyl.	15 H.P.	Catalog M-2
Four Cyl.	40 H.P.	Catalog M-4
Six Cyl.	50 H.P.	Catalog M-5

Also most complete line of Marine Electric Plants—350 watts to 25 k.w.

YARD AND SHOP

(*Continued from page* 118)

ITALIAN PROSPECTS

At present there are prospects of two Italian boats participating in the British International Trophy Race next year provided sufficient speed is developed.

Prince Carlo Ruspoli, a likeable young chap, who speaks English like an Englishman, rather good looking, about six feet in height, is threatened with a moustache, has a democratic sunny disposition and does not wear a monocle. He is a scion of one of Italy's ancient families, has a sufficient sense of humor to appreciate an American joke, and that is saying a great deal for a European.

During the Lido Regatta, while driving Miss America V in the King of Italy's race, he was credited with having saved the lives of Phil Wood and Orlin Johnson when Miss America VII broke up and sank.

The Prince expects to drive Savoia which is equipped with two Snyder Cup type Fiat engines with an aggregate of 3000 h.p.

The second possible challenger will be Marquis Corrado Del Pozzo representative of the Federazione Italiana Motonautica.

EUROPEAN CONTENDERS FOR THE BRITISH INTERNATIONAL TROPHY

Much speculation is now being indulged in in England and on the continent as to whether or not H. Scott-Paine will build a boat which will create a three cornered contest between English challengers, viz.: Miss Marion Barbara Carstairs, Sir Henry Segrave and H. Scott-Paine. Doubtlessly Commodore Gar Wood will replace Miss America VII which was destroyed in the race at Lido, Italy, and James Talbot, Jr. will make the third American entry. This combination, together with excellent prospects of two Italian boats, the Detroit Regatta next August promises to be the most interesting event ever staged.

The name of H. Scott-Paine of Southampton, England, has been a well known one in aviation and yachting circles since and during the War and now bids fair to become equally as well known in motor boat activity.

He was the organizer of the Super-marine Aviation Works which carried on 70% of the experimental hydroplane work during the War and is a Director of the Imperial Airways which company operates lines between England and the Continent, India and Africa. In 1922 he won the world-renowned Snyder Cup, his English hydroplane equipped with a 550 h.p. Napier motor making the phenomenal speed of 147 miles per hour.

His broad experience in airplane construction and engines naturally led him directly into super boat developments, resulting in building a number of fast boats among them Miss England for Sir Henry Segrave.

The remarkable achievement of this boat at Lido, Italy, with a 900 h.p. engine, winning most of the unlimited race trophies and recording better than ninety miles per hour, just under Gar Wood's record of 92.838 miles per hour is well known to the motor boat world.

Sir Henry Segrave has decided to build his own boat with the aid of Fred Cooper, designer, formerly with Sir Scott-Paine and the new craft, presumably Miss England II, if she develops the anticipated speed will be sent to Detroit next August to attempt to defeat Gar Wood in the World's Classic and return the famous British Internation Trophy to Great Britain.

Sir Henry also stated that he would have two 5½ litre boats at Detroit to participate in the Detroit News Trophy Race. This is the new Junior Class in which Commodore Gar Wood, Commodore Harry B. Greening, Aaron DeRoy and others will enter boats. He has already secured his reservation on the Berengeria next Summer for his trip to this country.

RANDALL COMPANY TO HANDLE CAILLE ADVERTISING

A recent report from the Fred M. Randall Company, advertising agents of Detroit, Michigan, contains the information that in the future the advertising of the Caille Motor Company, manufacturers of outboard motors, will be handled by them.

YACHT MARKET SOUND

The Bulwark, monthly publication of Henry J. Gielow, Inc., prominent New York naval architects and engineers, comments upon the condition of the yacht market during the recent financial crash in which the stock market was setting record lows. According to a statement made by J. A. MacDonald, president of the Gielow organization, sales of luxurious yachts were apparently entirely unaffected by the general sweeping depreciation in security values. While stock prices were descending rapidly, his firm received contracts for two new pleasure craft which cost a million and a half dollars each, with two additional orders for drawings of private yachts. Dumping of yachts on the second-hand market, a natural and anticipated reaction of the market crisis, failed to materialize, according to Mr. MacDonald.

(*Continued on page* 122)

Advertising index will be found on 3rd last page

Where Low Sales Are GOOD BUSINESS!

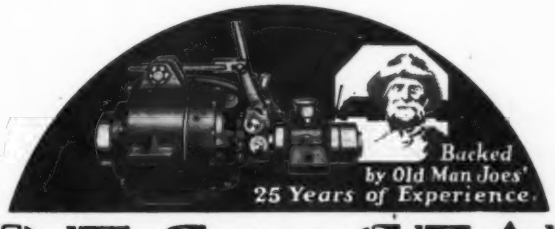
MAKING good money on repair parts is never good business. Every maker of a mechanical device who has earnestly striven to perfect it has seen his repair parts business take wings!

OUR BOOKS SHOW SUCH A CONDITION

In the face of greatly increasing sales of Joes Gears (and greater severity of use due to increased power and speed of the motor of today), our repair parts business steadily declines! No wonder 53 engine builders have standardized on Joes Gears.

Send for Bulletin—it's good reading.

THE SNOW & PETRELLI MFG. CO.
19 Fox Street, New Haven, Conn.



JOES FAMOUS REVERSE **GEARS**

REVERSE 80%~88%
of Motor Speed

Modernize Your Boat with a MORSE REDUCTION GEAR

A Morse Straight Line Reduction Gear will give your boat more speed and maneuverability, together with lowered maintenance and operating costs. Power at the propeller is increased and vibration is materially lessened. These gears are the ideal equipment for modern type power plants.

Morse Straight Line Reduction Gears are available for both Diesel and slow speed gas engines, as well as the higher speed motors. Installation drawings, and complete information will be mailed free upon request. Please state size and type of power plant when writing.

Morse Chain Co.
7601 Central Ave.
Detroit, Michigan

Photograph showing relative size of two new heavy-duty Morse Reduction Gears.

MORSE
STRAIGHT LINE
REDUCTION GEARS

Kelvin & Wilfrid O. White Co.

Boston — New York

Going South?

Let us supply you with your Charts, Books, Sailing Directions, etc.

Compasses Adjusted

Instruments Repaired or Supplied
SHIP BELL CLOCKS BAROGRAPHS
CHRONOMETERS SEXTANTS

Everything for Navigation

(As usual see us at Space 69 at the Show)

YARD AND SHOP

(*Continued from page* 120)

VETERAN PHOTOGRAPHER PASSES

It is with sincere regret that we note the recent passing of one of the best known figures in the professional marine photographic field—Edwin Levick, who on November 26 crossed the bar on his last voyage. He leaves a host of friends and associates to whom his death comes as a distinct loss and by whom he will be long remembered.

Mr. Levick's death occurred at his home at 173 Mt. Joy Place, New Rochelle, N. Y., as the result of heart disease at the age of 61. He had lived there for the past fifteen years, where he was a member of the New Rochelle Yacht Club and a member of its Art Committee as well.

Mr. Levick specialized in marine photography, in which profession he has established for himself a national reputation. Photographs of regattas and all kinds of artistic marine studies have been his particular interest, and reproductions of his work have been published in books, newspapers and magazines for the past twenty-five years. The excellence of his work is attested by his winning, last year, of the blue ribbon of the Photographers Association of America, awarded him for a series of his marine studies.

The late Edwin Levick

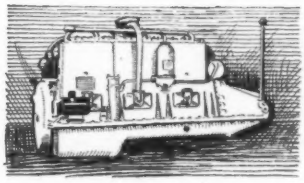
Born in London, the son of a former British Consul in Suez, and educated in France, Mr. Levick came to America thirty years ago. He was raised in the Far East near the Red Sea and, with no other playthings at hand, he soon learned to build and sail boats, assisted by the native children of the locality. It was here that he acquired the love of the water which he carried with him through life. During his first few years in America Mr. Levick earned his living by writing on general news topics, which occasionally were illustrated with his own photographs. In this manner his camera studies attracted attention and gradually the writing was dropped and his time was devoted exclusively to photography.

Mr. Levick's work has included other subjects such as polo, golf, tennis, horseracing, winter and other sports but marine views have always been his specialty. He has made numerous striking pictures about the waters of New York.

Mr. Levick is survived by his wife, Mrs. Eleanor Hooper Levick, a daughter, Miss Kathleen Levick, and two sons, John and Philip. His business is to be carried on under the name of Edwin Levick, Inc., of which organization his son John is president.

(*Continued on page* 124)

Advertising index will be found on 3rd last page



Two years ago down-draft carburetion was to be found on only one motor—the 200 H. P. Scripps.

✦

Today "down-draft carburetion" is a term that slides glibly from the tongue of every salesman striving to lend to his product the distinction of the first class.

✦

Thus *Scripps has erected another beacon of progress along the path of the marine engine industry by which others are guided in their course.*

SCRIPPS MOTOR COMPANY, 5819 LINCOLN AVENUE, DETROIT, MICHIGAN

SCRIPPS

· THE MOTOR THAT CROSSED THE ATLANTIC ·

Standard Equipment on Well-known Cruisers

"Gold Medal" Folding Chairs have become the choice of discriminating boat owners and foremost builders everywhere. They provide true comfort, and fold compactly for stowage.

"Gold Medal" Chairs are made of seasoned hard wood, stained a light mahogany and varnished. Will harmonize with any surroundings aboard or ashore. All metal parts are of heavy gauge brass.

GOLD MEDAL FOLDING FURNITURE CO.
1754A Packard Avenue
Racine, Wis.

Chair No. 35-Y

Has patented rubber feet to eliminate marring or slipping. This chair also furnished in red or green lacquer with colored covers for home and club use.

"GOLD MEDAL"
Folding Furniture

New Twenty-Three Foot

ABC ATLAS RUNABOUT

AT the National Motor Boat Show, Grand Central Palace, New York, January 17th to 25th, (Section U) we will introduce the new ABC Atlas twenty-three foot double cockpit runabout. A boat designed and constructed by men having life-long experience with high quality motor craft.

The ABC Atlas twenty-three footer, powered with an eight cylinder 110 H.P. motor has a speed in excess of 35 M.P.H. It is staunchly constructed, having mahogany planking; solid white oak frames; double planked bottom, generous beam and ample free-board, insuring ruggedness, stability and dryness at all times. It is beautifully finished, handsomely upholstered and tastefully trimmed with durable chromium plated hardware.

ABC runabouts and sedans in nineteen, twenty-six and thirty-foot sizes are easier to drive than an automobile—and you need no boating experience to run one.

Write today for complete information and prices.

ATLAS BOAT CORPORATION
Builders of High Grade Boats
MENOMINEE, MICHIGAN

YARD AND SHOP

(*Continued from page* 122)

KERMATH IN CANADA

One of the newsiest and most entertaining little sheets we have perused in quite a while is a pamphlet called Kermath in Canada, edited by the staff of the Kermath Manufacturing Company in Canada. Its items are presented in such a way as to make them of interest even to those unacquainted with the local characters that are the subjects of some of their spicy and humorous remarks. Aside from witticisms, the reader will pick up a lot of valuable information in its comments and suggestions.

A USEFUL HANDBOOK

Mechanically inclined yachtsmen who do their own engine overhauling will be glad to learn of a new book prepared by C. T. Schaefer, called The Automotive Mechanic's Handbook. While it deals primarily with automobile maintenance, the principles of engine repair are as applicable to the modern marine motor as they are to the automobile engine and are treated in a very understandable manner by the author. A great deal of space is devoted to the problem of diagnosing trouble, and all conceivable sorts of engine ailments are outlined in handy charts with suggested tests and remedies. A large part of the text treats of modern methods of testing and numerous diagrams and illustrations help to give the reader a better understanding of the principles set forth. Harper and Brothers are the publishers.

DODGE FIGUREHEADS SET FASHION

A distinctly new style note in the motor boat world has been set by the Horace E. Dodge Boat & Plane Corp., of New York, Detroit and Newport News, Va., in the adoption, for all its 1930 boats, of an artistic nickel-steel non-tarnishing figurehead in a graceful mermaid design. This attractive figure, which will grace the bow of every 1930 Dodge boat, was designed by Russell G. Crook, one of the best known sculptors in the United States.

Mr. Crook is particularly well known in Boston as a sculptor and ceramicist, and is one of the charter members of the Boston Society of Arts and Crafts. He studied with St. Gaudens for many years and, aside from being a sculptor, is considered an authority on Greek ceramics, a subject on which he has delivered a number of lectures for the American Society of Ceramics and for the Boston Museum of Fine Art. Some of his most interesting sculptored features were done for the late Thomas Lawson, Boston financier, for his estate, Dreamwold, considered one of America's show places by prominent architects. Specimens of Mr. Crook's sculpture are still on view at Dreamwold.

It is expected that the new figurehead on Dodge boats will start a fashion among American craft and that during the next couple of years figureheads on runabouts and cruisers will be as varied and attractive as the radiator cap ornaments on our automobiles.

SEA ISLAND ATTRACTS NOTED SPORTSMEN

A group of internationally known sportsmen headed by Rex Beach, Irving Cobb, Ray Long, president of the International Magazine Company, Thomas R. Shipp, well known Washington newspaper man, John W. Wheeler, president of the Bell Syndicate and William Hopkins, vice-president of the Scripps-Howard Newspapers, will arrive at Sea Island Beach, Georgia, Sunday, December 8, to fish and hunt on the 60,000-acre hunting preserve of the Sea Island Company.

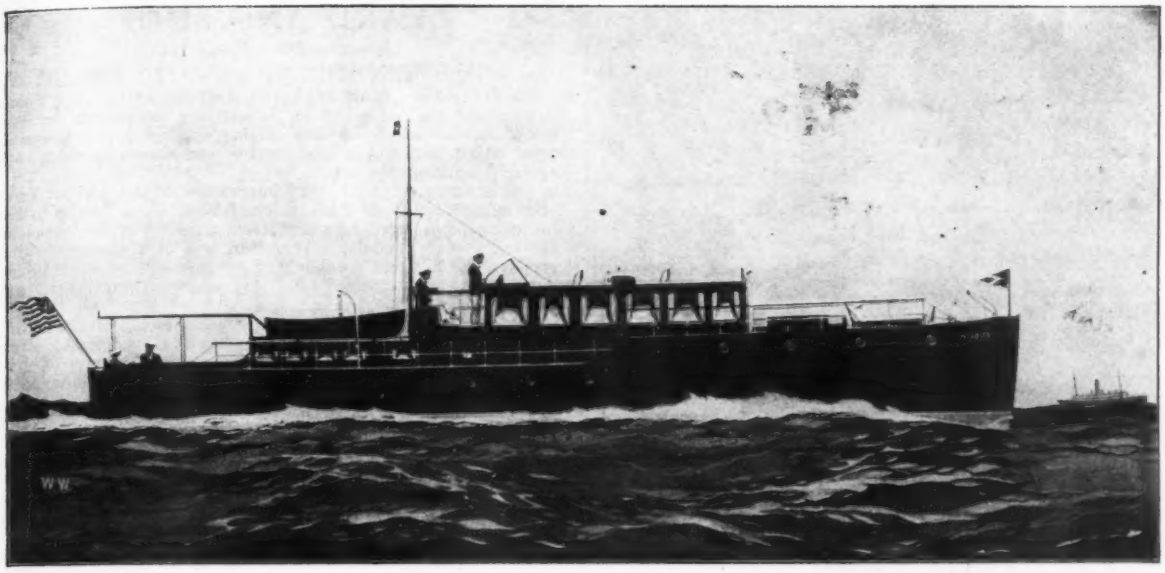
This distinguished party will make their headquarters at the Sea Island Hunting Lodge, made famous by ex-President and Mrs. Coolidge's visit there during their holiday vacation last year. The lodge is in a primitive wilderness of nearly one hundred square miles where for the past hundred years the ancient forests have witnessed the tread of but few white men with the result that there is an abundance of deer, wild turkey, possum, wild cat, quail and water fowl.

BOATING EVENTS AT CHICAGO'S '33 EXPOSITION

In 1933 Chicago is to hold a Century of Progress Exposition, which is supposed to eclipse anything ever staged before in the exposition line. In order to take advantage of this event to stimulate interest in boating activities generally, preparations are under foot for the promotion of a series of national racing events during the period of the exposition's run. Thousands of visitors will undoubtedly be in Chicago at that time not only from all parts of this country but also from abroad as well and an excellent opportunity will be afforded to promote public interest in all branches of yachting and boating.

(*Continued on page* 126)

Advertising index will be found on 3rd last page



ANOTHER SMART CRUISER

All Treiber Diesel Equipped

ONE of the smartest Diesel Cruisers scheduled for launching early in 1930 is the handsome 80-footer pictured above. She was designed, and is now being built by the Consolidated Shipbuilding Corporation, at Morris Heights, New York City, for a prominent Detroit Yachtsman.

Gasoline engines were originally ordered for this boat. Her owner, however, being "Diesel minded" subsequently decided to investigate The Treiber Diesel, of which he had heard favorable reports.

This lead him to the Treiber plant where he found that he could obtain Treiber Diesels of exactly the same horsepower and practically the same weight and dimensions as his gasoline engines. He also found that Treiber Diesels would give him about the same boat speed as his gasoline engines *with the important added advantage* of DIESEL SAFETY and ECONOMY.

As a result he cancelled his order for gasoline engines and instructed the builders that his yacht be *all Treiber Diesel equipped* with 600 H.P. Main Engines (Twin 300 H.P. 12 V-cylinders) and a 7½ K.W. Electric Generating Set.

The moral of this incident is self-evident —Whether you contemplate the building of a new boat or the Diesel conversion of the old, by all means *make a personal investigation of the Treiber.* You will find, amongst other things, that it is the only Diesel in America built within the range of gasoline engine sizes, that can be considered truly comparable with a gasoline engine.

As a first step in your investigation, send for the Treiber Bulletins. They illustrate and describe Electric Generator Sets 7½ to 70 K.W. Capacity and Marine Engines 65 to 3000 H.P. They will gladly be mailed, without obligation, upon request.

Treiber Diesels will be on display at the National Motor Boat Show
Grand Central Palace - - New York - - January 17th to 25th

TREIBER DIESEL ENGINE CORP.

Dept. M. CAMDEN, NEW JERSEY U. S. A.

Cable Address: "Deselmotor"

We show above various sizes of incandescent searchlights suitable for any style boat. Catalog I—Incandescent Searchlights. Catalog A—Arc Searchlights.

THE CARLISLE & FINCH CO.

261 E. Clifton Ave., Cincinnati, Ohio

OWENS BOATS

20 Ft. DOUBLE COCKPIT RUNABOUT	26 Ft. CABIN CRUISER RUNABOUT
20 to 30 Miles per Hour	15 to 25 Miles per Hour
Price $980	Price $1680

THESE boats are built in the best possible manner of the finest materials. Mahogany, over white oak framing, with bronze fastenings throughout.

They are up-to-date, completely equipped for every service and comfort; the cruiser with berths, galley, toilet and all necessary details; the runabout with a full inventory that accompanies the finest outfits.

The prices will surprise you:

FOR THE RUNABOUT.....$ 980
FOR THE CRUISER.....$1680

and up, depending, of course, upon the motor.

Let us tell you more about them.

OWENS BOAT COMPANY

ANNAPOLIS, MARYLAND

YARD AND SHOP

(*Continued from page* 124)

WIDEGREN KILLED IN AUTO CRASH

On December 9, Earl Widegren, well known outboard racing driver, was the victim of an unfortunate automobile accident, when the car which he was driving crashed into a telephone pole, killing him and one of his five companions instantly, and severely injuring the others.

The accident occurred at an intersection of the Jericho Turnpike near New Hyde Park, Long Island, when Widegren and his companions were returning from a party in celebration of his twenty-fifth birthday. Widegren was at the wheel, and in endeavoring to avoid a crash with another car, he swerved into a telephone pole, caromed off it and smashed into another pole totalling demolishing the car.

Widegren was well known in outboard racing circles having competed regularly in numerous events with a considerable string of victories to his credit. Perhaps the most important of these was his winning of the first Outboard Marathon from Albany to New York For the past two years he has been proprietor of a garage in Locust Valley, Long Island, where he was a resident.

In a letter to Comm. C. F. Chapman, Bruno Beckhard, commenting upon the recent death of Earl Widegren in an automobile accident, makes the suggestion that the name of Widegren be associated with the Speed Fund. He says: "I do not believe we should abandon the title Speed Fund, but it might in official form bear the subtitle 'In Memory of Earl D. Widegren.'

"I make this suggestion not because Earl was an exceptional driver but because his tragic passing has brought it home to us how unexceptional he really was. He burst upon us as winner of the first Albany-New York race—although at the time he knew little of boats and less of motors. For the rest of his first season he was a mark to shoot at, and pretty nearly everybody took him into camp. His second season found him well aware of the fact that beginner's luck was poor fuel and he applied himself earnestly to producing results. He had to be reckoned with. The end of the season found him well up among the leaders.

"Win or lose he got a tremendous kick out of the game—and he said so. 'Gee, but this is fun,' was almost his favorite expression. He would drive all night to make a regatta—and as likely as not arrive with his motor in a basket. Then he and his father, or his younger brother or a neighbor, as the case might be, would be furiously busy until gun time—what of it?

"Earl was instantly killed in an automobile accident on Dec. 10. He was, I believe, the first of the outboard fraternity to be taken from us. The suddenness of the tragedy seemed to emphasize to all of us for the first time how much we had come to take each other for granted, how much to each of us, our playing together has meant. The sense of loss expressed in countless messages is out of all proportion to any personal intimacy that existed. It reflects, I am sure, a feeling that Earl was typical of all of us, that in playing the game he gave something to all of us, that his happy grin, his cheerful, good nature was somehow an important part of a cherished picture.

"It is therefore in keeping that his name should be linked with the development of the sport that meant so much to him, and to which as simply one of us he made no inconsiderable contribution."

SELF-INFLATING LIFE VEST

The Markus Self Inflating Life Saving Vest, called the M. S. I. for short, manufactured by Markus Devices, Inc., Kansas City, Mo., is a new invention which has decided interest and improvement. First of all, it should be said, for the benefit of the practical-minded reader especially, that this new life-saver is purposely made to float the wearer on his back and support his head well above the water. It is also made for convenience of the wearer when not required in the water. Further, if the wearer is a swimmer he can swim in the vest while it is inflated and need not swim on his back. In swimming forward with the breast or crawl stroke the vest floats the wearer quite high in the water, a decided advantage in swimming in waves.

Thus whether on the back or swimming in customary fashion, the person's head is well above the water.

The M. S. I. Vest is worn like an ordinary vest. The material is the well known Airubber fabric—inside rubberized strong olive drab jean, completely vulcanized. The buttons are dome snap fasteners. Back of vest is entirely open, sun type. There is an adjustable strap, so the vest will fit any wearer. It is customarily worn with the strap adjusted a little slack to provide ample room for full inflation if required.

Inflation is instantaneously obtained by a single short jerk of the discharge lever, which fills the vest with two gallons of air.

(*Continued on page* 128)

Advertising index will be found on 3rd last page

Now Ready for the 1930 season

A PRINCELY NEW CRUISER

Mahogany finished
Two double cabins
Double planked
Two 180 horse power each, Speedway engines

Large bridge deck
After cockpit
One man control
Accommodations for one or two in crew

20 miles cruising speed

Forty-five years experience in Marine designing and engineering insures faultless Construction, Completeness in equipment and distinctive in finish.

CONSOLIDATED SHIPBUILDING CORPORATION
MORRIS HEIGHTS, NEW YORK

▼

SEE IT AT THE SILVER ANNIVERSARY OF THE NEW YORK MOTOR BOAT SHOW

GRAND CENTRAL PALACE — JANUARY 17th - 25th

WOOLSEY'S Paints & Varnishes

TRADE MARK

Quality Products Since 1853

You Will Surely Require Copper Paint

BUY THE BEST!

WOOLSEY'S Copper Paints, put up in Red, Brown, and Green, have been standards of excellence for the past 76 years. They give absolute protection against fouling either by seaweed, barnacles or other marine growth. It will pay you to use WOOLSEY'S.

Write today for Marine Paint Booklet—Free

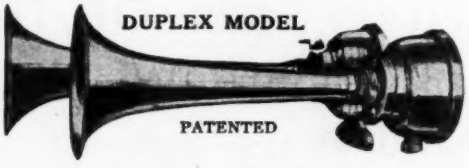
See our exhibit at the New York Motor Boat Show—Jan. 17 to 25—at Booth 17.

C. A. WOOLSEY PAINT & COLOR CO.
Jersey City New Jersey U.S.A.

STROMBOS

compressed air marine signal

Made in 15 models and tones for all types of sea, river and lake craft. With curved and straight projectors, of polished brass, nickel or chromium. Operates from pet cock or air tank.



At a touch of the button or cord your Strombos, *the long distance marine signal,* speeds messages far ahead, penetrating wind, fog, storm and noise. Distinctive, pleasing tone aids clear reception. Send for catalog.

(DEALERS—Selling Strombos signals satisfies your customers and yourself!)

J. THOMAS RHAMSTINE*

Successor to American Strombos Co.

504 Woodbridge East Detroit, Mich.

YARD AND SHOP

(*Continued from page* 126)

SPARKMAN-STEPHENS CONSOLIDATE

On and after January 1, 1930, the yacht brokerage and marine insurance business conducted by Drake H. Sparkman, at 11 East 44th Street, New York City, and the firm of Sparkman & Stephens, Naval Architects, composed of Drake H. Sparkman and Olin J. Stephens, 2nd, doing business at the same address, will be consolidated, and the business of both firms transacted by Sparkman & Stephens, Inc.

Mr. Sparkman, who will be president of the new organization, has been in the yacht brokerage business since before the war, having been connected with the G. W. Ford Yacht Agency until the war broke out, when he joined the U. S. Naval Reserve Force and served as ensign on the U. S. S. Montana. After the war he resumed his connection with the Ford office until 1921, when he became associated with the marine insurance firm of Wagner-Taylor-Edson Co., Inc., with whom he was connected for two years and where he secured his ground work in the marine insurance business. In 1923 he joined the organization of Roger M. Haddock, Naval Architect and Yacht Broker, taking charge of their insurance and sail boat department, with which firm he was connected until 1927, when Mr. Haddock retired from active business. Mr. Sparkman has continued Mr. Haddock's business from 1927 up to the present time. Mr Sparkman has been actively interested in yacht racing on Long Island Sound, and is a member of the New York, Larchmont and American Yacht Clubs.

Olin Stephens, 2nd, is one of the younger naval architects. He prepared in Massachusetts Tech. and prior to becoming associated with Mr. Sparkman, was with the Henry J. Gielow organization and Henry B. Nevins, Inc. Mr. Stephens is one of the most skilful yacht sailors on Long Island Sound, having successfully raced his 6-meter sloop Natka and the Sound schooner Alicia. Among the more recent boats designed by Mr. Stephens are the auxiliary sloop Kalmia, which won in her class in the Gibson Island Race in 1929; the 6-meter sloop Thalia, built for L. G. Young of the American Yacht Club, and the Sound Junior class sloops built in 1929 under the auspices of the Junior Yacht Racing Association of Long Island Sound. Another of Mr. Stephens' more recent boats is the Bermuda cutter Marganita II, now building at Minneford's Yard, City Island, for H. S. Sayer of New York. Three 6-metres from Mr. Stephens' design are now building at Nevins' yard.

J. Burling Murray, a director of the new corporation, has been interested in yachting activities practically all his life, though his association in the business end of yachting has been short but very active. Mr. Murray is a graduate of Princeton University and during the war was commissioned in the U. S. Naval Reserve Force. He is a member of the Indian Harbor Yacht Club and the Beach Club of Greenwich, Connecticut.

James D. Sparkman, a director of the corporation, became associated with his brother two years ago, and since that time has taken active charge of the motor boat end of the business. Prior to entering the Yacht Brokerage business, he was associated with DeCoppet & Doremus, members of the New York Stock Exchange. He is a member of the Larchmont and Horseshoe Harbor Yacht Clubs.

W. Hayward Powers, the junior member of the firm, has been in the Yacht Brokerage business since leaving school, specializing in the sale and charter of the smaller cruising and racing sail boats. He is a member of the Larchmont Yacht Club, Manursing Island and Apawamis Clubs.

To take care of the rapid growth in all branches of the business, the new organization has taken larger offices in the same building where they were previously located, 11 East 44th Street, New York City.

FLORIDA PROSPECTS BRIGHT

According to a report from a correspondent in Florida business activity in the whole state of Florida in general and in Miami Beach in particular continues to be bright and does not seem to have been affected by the general business slump throughout the country. Available figures show that $150,000,000 has been expended on property, new buildings, furnishings and landscaping in Miami Beach during the past eight and a half years, and it is questionable whether any other American city of comparative size has had as much new construction during a similar period. Miami Beach has led the state of Florida in amount of building permits practically every month of the year. New people are pouring in to fill the many homes that have been built during the past summer. Public schools report larger attendance than for any previous year, homes are renting rapidly and hotel reservations for the winter are heavier than at any other time in the past.

(*Continued on page* 130)

Advertising index will be found on 3rd last page

1930 *and the* SEA SLED

And what there is in it for the alert dealer

Just in the brief time since our present sales policy was established, the record of rising sales shows clearly what alert dealers can do.

The best boat dealer in New England, the best in the Middle West and the best on the Pacific Coast are all *Sea Sled dealers*. They purchase, of course, in carload lots.

But outside these, one dealer in a little place made a single sale of twelve Sea Sleds to one yacht club, and after a season's use they report themselves as delighted with the purchase — say *it's building up the club.*

Another sold six Sea Sleds in six weeks to duck hunters in a village you wouldn't know the name of.

And still a third, down on the Gulf Coast, for months on end sold each Sea Sled we sent him before we could deliver another.

It all comes down to this: That on the Atlantic and Pacific Coasts, up and down the wide rivers, on the Great Lakes, and all along the Gulf Shore, the Sea Sled will give a smooth, safe, fast and continuous performance in rough or shallow water — a performance which no craft of the same size with narrower bow and deeper draft can possibly equal.

We want a lot more of the same kind of dealers this year. Isn't there something in this for you?

FOR 1930 the Sea Sled patents still remain the last word in naval design for moderate sized craft of high power and speed.

The inverted V bottom and surface propulsion covered by these patents have never been excelled. Today they still furnish the ultimate in safety and seaworthiness coupled with fast performance.

The materials and workmanship which have invariably been maintained at the highest standard have no place to go for improvement until new materials are discovered or invented.

So 1930 will find the Sea Sled speeding to new achievement without material change of structural design except for minor refinements and luxury of accessories.

There will be one new type — Model 14 — which will be worth a special trip to the Motor Boat Show just to look at and gloat over.

But the owner of a Sea Sled can rest secure that no sudden "hunch" or unbalanced craze to outdo competition is going to make his Sea Sled "old-fashioned," "obsolete," or anything but the most utterly competent craft of its type on the seven seas.

TRADE-MARK REG. **SEA SLED** U. S. PAT. OFFICE

THE SEA SLED CORPORATION

Sole Licensee under Hickman U. S. Patents

226-228 Fourth Ave. at 19th St., New York

Yards at W. Mystic and Groton, Conn.

Model 26—Speed from 42 miles an hour down, carries ten with safe luxurious comfort, the last word in streamline design

HIGHEST FACTOR OF SAFETY **SEA SLED** OF ANY CRAFT OF THE SIZE

SPEED · · WITH COMFORT AND · · SAFETY

Immediate Stock Delivery

EVERDUR
SCREWS, BOLTS, NUTS, RODS AND SHAFTINGS

TOBIN BRONZE
& EVERDUR SHAFTING

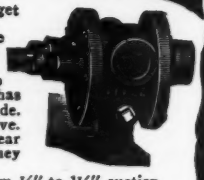
Copper, Brass and Bronze
Sheets . . Rods . . Tubes

T. E. CONKLIN
BRASS & COPPER CO.
INC.
54-60 Lafayette Street, New York

Tel. Walker 7500

MEMBER COPPER & BRASS RESEARCH ASSOCIATION

LOBEE CIRCULATING & BILGE PUMP



You can't get a better or more reliable pump than the Lobee because there isn't a better one made. It has been the World's Standard of Pump Quality for 25 years. No other pump has proven so popular in the marine trade. Simple, compact, noiseless and positive. These pumps will outwear the engines to which they are attached.

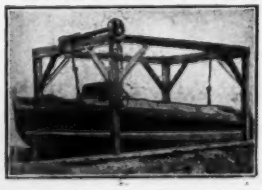
Gear and Rotary Pumps from ⅛" to 1½" suction and discharge. Different designs for various types of drive and mounting made to order.
Write today for catalog and prices.
Sold by Leading Dealers Everywhere.

Lobee Pump & Machinery Co.
1790 Niagara Street, Buffalo, N. Y., U. S. A.

Algonac Boat Hoists

Hand hoists make very good means for laying up your boat. Immediate delivery on standard model hoists. Write for information.

Hand . . . and . . . Electric . . . $115 to $250



Monnier Bros., Inc.
Algonac, Mich.
Represented by the Leading Boat Dealers in the Following Cities:
Chicago, Ill. — Galveston, Tex.
Lyon, Miss. — Calumet, Mich.
Oshkosh, Wisc. — Toledo, Ohio
Miami Beach, Fla.
We still have some very good territories open for live dealers.

YARD AND SHOP

(*Continued from page* 128)

EGYPTIAN OWNER PRAISES AMERICAN RUNABOUT

A very interesting account of a rather unique and unusual cruise came to hand from Aly Bey Yehia, whose residence is in Alexandria, Egypt. Among the Port Said notes appearing in a recent issue of the Egyptian Mail the following story briefly recorded the event. It is interesting to note that Ali Bey Yehia recently purchased the 26-foot Hackercraft, powered with a 200 h. p. Kermath valve-in-head six.

"On Sunday morning a small motor boat arrived in harbor, and on reaching the Canal Company's wharf, it was found to be that belonging to Ali Bey Yehia, the son of Yehia Pasha. He had come by sea from Alexandria, a distance of one hundred and forty-six nautical miles in four and a half hours. This remarkable feat was accomplished by an American engine, and speaks well, not only for the boat, but for the driving and piloting as well. About 10:15 Ali Bey Yehia and a few friends left Port Said via the Suez Canal for Ismailia, to go thence by fresh water canal for Cairo, and no doubt to complete the round trip to Alexandria by the Nile. The journey from Port Said to Ismailia was made in about one hour and fifty minutes."

Aly Bey Yehia of Alexandria, Egypt, with his 26-foot Kermath-powered Hackercraft

In commenting on the performance of his boat, Ali Bey Yehia stated the first half of the trip was decidedly rough with a very strong head sea but, in spite of this, kept the engine at a comfortable speed of 1700 r.p.m. without a single misfiring or the slightest change in engine revolutions. "We did not get a single drop of water on deck, and the flying spray merely touched the stern, where the seats were naturally covered. The trip was the talk of all sporting circles for quite some time—a real nine days' wonder, in fact. Even officials and the Port Authorities were amazed at the boat's performance."

NEW PILOT BOOK OUT

The 1930 edition of the Eldridge Tide and Pilot Book has just came to hand with its usual amount of practical information concerning tides and currents, lights and fog signals, courses and distances, and other useful data used by every pilot in the ordinary course of navigation between Cape Hatteras and Eastport.

It is one of the most useful books of its kind, giving this information in a practical stayle and although this is the 55th year of its publication, it is still going strong and the publishers, Kelvin & Wilfrid O. White Company, report that the demand for the book is greater than ever.

Copies of this book are now on sale at all nautical stores.

(*Continued on page* 132)

Advertising index will be found on 3rd last page

HOWARD W. LYON

"All 1930 SEA LYONS will have TOBIN BRONZE Shafting"

. . Howard W. Lyon

TOBIN BRONZE Shafting has given complete satisfaction in Sea Lyons owned by such men as:

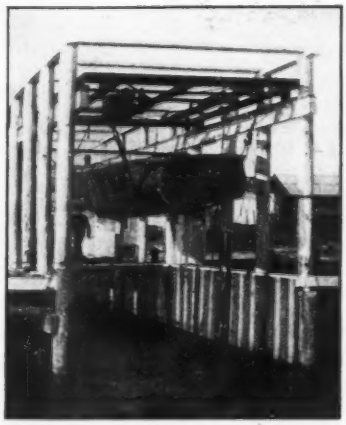
John McEntee Bowman,	New York, N. Y.
Major H. O. D. Segrave,	London, England
Sherman M. Fairchild,	New York, N. Y.
Sailing W. Baruch,	New York, N. Y.
Caleb S. Bragg,	New York, N. Y.
Lawrence P. Fisher,	Detroit, Mich.
W. K. Vanderbilt,	New York, N. Y.
Igor Sikorsky,	New York, N. Y.

Consequently, we have decided to use this metal for shafting in all of our 1930 models".

Howard W. Lyon

Made solely by the American Brass Company, TOBIN BRONZE* is furnished in trade-marked sheets, rods, tubing, and turned and specially straightened shafting.

*Trade Mark Reg. U. S. Pat. Off.

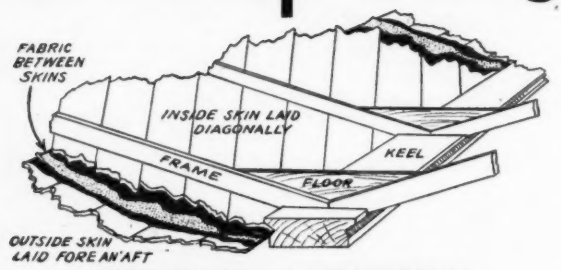


Electric boat hoist, typical of the modern equipment at the Lyon plant.

THE AMERICAN BRASS COMPANY
General Offices: Waterbury, Connecticut

ANACONDA COPPER
BRASS ANACONDA BRONZE

double planking



FERDICO AVIATION LIQUID MARINE GLUE

Tenacious—Resilient—Durable—Preservative

After laying the diagonal planking give it a liberal coat of FERDICO AVIATION GLUE. Stretch the fabric tightly and snugly over the glue and tack down. As the outer planks are put in place give the fabric another generous application of glue.

FERDICO AVIATION GLUE is used by the U. S. Government for airplane pontoons.

There is a **Jeffery's Glue** for any leak

Send for free booklet, "Marine Glue Uses."

L.W. Ferdinand & Co.
152 Kneeland Street, Boston, Mass.

Size 8" x 11"
Price $12.50

DE LUXE YACHT LOG

For Pleasure Entries.

Keep a record with notes, sketches or photographs, the interesting happenings of cruises, fishing parties or races.

First Of Its Kind

No other log like it. Printed on heavy art paper, bound in real calf. Cover embossed with your club burgee and house flag, in gold leaf and oil colors. An artistic, durable and practical addition to your library. Grows more interesting as records accumulate.

PUBLISHED YEARLY—Be sure and send the name of your boat, yacht club, and design of your house flag in colors, with your order.

LOOK FOR US at the NEW YORK MOTOR BOAT SHOW

Marine Publishing Co., Box 265, Beverly Hills, Cal.

Improve your Marline-Spike Seamanship

LEARN all a boatman should know about rope—what kind and size to use for moorings, running rigging, general equipment—use and care of rope—other valuable information. It is FREE. Explained and illustrated in our booklet, *"Rope for the Boatman."* Write:

PLYMOUTH CORDAGE CO.,
North Plymouth, Mass.

PLYMOUTH *The Rope You Can Trust*

YARD AND SHOP

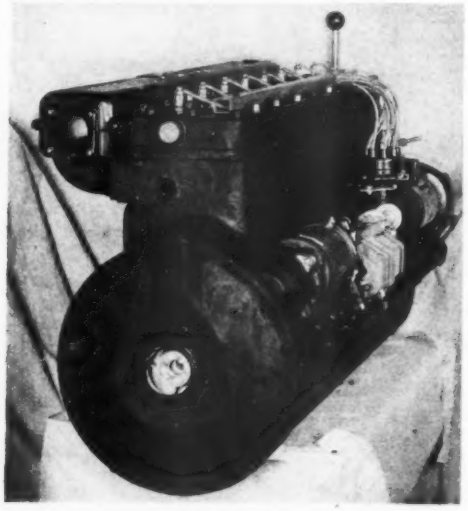
(*Continued from page* 130)

NEW PLANT AND MODELS FOR NIAGARA

Motor boat enthusiasts visiting the Show this year will be interested in the offerings of the Niagara Motor Company of Dunkirk, N. Y. This display will include engines of the most advanced types of marine motor construction and embody new features most desired by experienced and particular owners. They will be located in space 425, fourth floor.

Niagara is one of the pioneers in the marine engine industry and has been established for over twenty-five years. It has a world-wide reputation for the high quality of its engines as is evidenced by repeated government, state and municipal orders, in which they have proved their enduring qualities and dependability.

The plants are located at Dunkirk, N. Y., thirty miles west of Buffalo on the shores of Lake Erie, and the recent completion of a new plant and general offices of 32,000 square feet makes an addition of 300 per cent more floor space than the old plant provided. This old division has been occupied for over fifteen years and is still running to capacity. The new one is of the most modern type constructed of steel and glass and is located on the main line of the Pennsylvania Railroad with private siding. It is equipped with traveling overhead cranes the full length of the shop, serving test blocks and shipping room. Oil-burning heat treating furnaces are used, as well as machinery of the most up-to-date precision type. All models are made from jigs and fixtures to insure interchangeability.



Niagara's new straight 8—built in 132 and 156 h. p.

The outstanding motors of the Niagara line for 1930 are the two new eights of 128-132 h.p. and 152-156 h.p., being L-head in line, with special aluminum alloy heat-treated blocks, prepared under a patented process of Chromilite-Oxidizing which prevents corrosion due to salt air or water. The sleeves which are inserted and sealed are of high nickel content giving great strength and resistance to wear. Pistons are of new, hard aluminum alloy with 1-1/8-inch diameter floating pins, equipped with four rings each including oil return ring and groove. Rods are of forged aluminun with spun-in babbitt.

Crank shaft is of unusual size, being 2¾ inches in diameter on the main bearings and made of heat-treated steel giving a tensile strength of 105,000 pounds. Finished it weighs over 118 pounds and is ground to a mirror-like surface. The camshaft is hollow and fitted with five bearings, and is force fed. Bearing diameters are 1-15/16 inches inside. The drive is Link-Belt silent chain with automatic adjustment that requires no attention and is absolutely silent.

The exhaust manifold is water-jacketed and of liberal size, with flange for either three-inch pipe exhaust or 3½-inch diamater tubing. The intake-manifold is of the double type using Duplex double-throat carburetor equipped with flame arrester, and intake led to the valve cover plate to eliminate engine compartment odors. Fuel is fed by built-in A. C. pump operating from the camshaft and equipped with strainer. A Root type blower super-charger is also built in as standard equipment.

(*Continued on page* 134)

Advertising index will be found on 3rd last page

ERICO-KAINER Co.

KAINER & Co.

Announcing
A Change in Name-

from Erico-Kainer Co. to Kainer & Co.

Kainer & Co. always has manufactured the products so widely known as Erico-Kainer and making this change in name, serves to simplify detail and facilitate business operation.

Mr. Hubbard H. Erickson's affiliation with the organization, we are happy to announce, remains unchanged and he continues his activities in the field as Vice President and General Sales Manager.

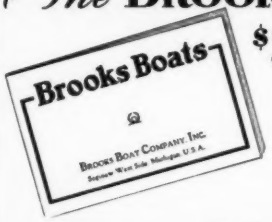
With this change, in name only, of a Company already long established, Kainer & Co. takes this opportunity to express its deep appreciation to the Boat Builders throughout the world, who, by their wholehearted acceptance and co-operation have made possible the outstanding success of Erico and Kainer Marine Products.

Drop us a line for your copy of the new 1930 catalog of Erico and Kainer Marine Specialties.

KAINER & COMPANY
CHICAGO

Manufacturers
763 Mather St., Chicago, U. S. A.

The BROOKS PLAN *gives*



$3 worth of boat for every $1 you spend!

a Cruiser

a Sail Boat

a Runabout

an Outboard Speedster

—or most any craft your fancy desires

Send only 10c for illustrated book showing 55 different Brooks models — from duck boats to cabin cruisers — which come knocked-down. You put them together from easily followed patterns — have something interesting to do in your leisure—and save 2/3 the cost. You don't have to be a carpenter or an architect either.

Write today enclosing 10c for copy of the book—giving details of 55 different boat models and prices.

BROOKS BOAT CO., Inc.
Dept. A3
SAGINAW WEST SIDE, MICH.

Pioneer Magnetic Compass

For cruisers and fast boats only. Accurate. Easy to read. Easy to install. Full particulars on request.

PIONEER INSTRUMENT COMPANY
754 LEXINGTON AVE. BROOKLYN NEW YORK

PRODUCTS FOR MARINE SERVICE

AC Instrument Panels
AC Tachometers
AC Thermo Gauges
AC Oil Pressure Gauges
AC Ammeters
AC Spark Plugs

Write for descriptive folder, giving us name of your nearest dealer

AC SPARK PLUG COMPANY
FLINT, *Michigan*, U. S. A.

YARD AND SHOP

(*Continued from page* 132)

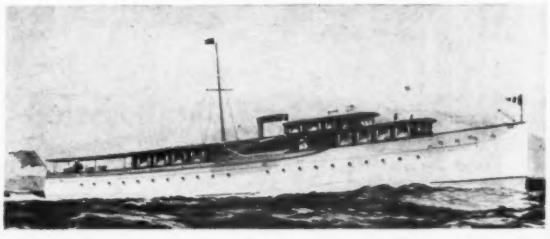
Oiling is by force feed from a submerged pump with pressure release and double strainer on dual intakes. The crankcase is positively cooled by a built-in blower at the front end of the crankshaft operating in a specially designed housing. The reversé gear is the famous Joes with ball bearings and double clutch construction designed to supply the highest possible reverse ratio.

These motors are extremely light considering the heavy crankshaft and bearings, weighing about 869 pounds in the 8 L type and 882 pounds in the larger 8 M model. They are designed to turn continuously at 2800 to 3100 r.p.m. The overall height from the engine bed is 17½ inches, the width of the beds 16 inches, and the depth of the pan is 6 1/16 inches from the bed. The overall length of both models is the same, that is, 66 1/8 inches.

Standard equipment includes a number of necessities that are sometimes listed as extras. They include tachometer head complete, mounted in panel with cable and built-in tachometer drive, panel with light, switches and lock, ammeter and oil gauge, as well as heat indicator with unit mounted in the cylinder head. A choke of required length is also supplied which is a unit with the panel. Other equipment is the usual generator, starter with switch, oil cooler, oil filter, distributor and coils, wires and plugs, gasoline pump, strainer, flame arrester, manifold heater, couplings, hand sump pump, tools, starting crank, etc.

These engines are made in three types of two sizes, including built-in ball bearing silent reduction gears of six-inch face built right into the oil base and not added on in a separate housing as an afterthought. The rervese gear housing may be removed without disturbing the reduction gears or removing any other part. Reductions are available in ratios of 1¾ to 1, 2 to 1, 2¼ to 1, and 2½ to 1 and are complete with large coupling flanges on 1¾-inch shafts.

In addition to these new models, the well-known 2¾ by 4 Niagara special 4-cylinder engine will still be manufactured to meet the requirements of many customers. Improvements in design and efficiency of this little model have raised the horsepower output to 12-16. Another Niagara headliner is the 3 by 4 Highspeed, a 4-cylindered ball-bearing engine developed in 1927. The Highspeed develops 35 h.p. and is of comparatively light weight and accordingly is well suited to use in light runabouts and similar work.



Harvey W. Harper's Sunshine III, designed und built for him by the New York Yacht, Launch & Engine Company

ANOTHER FINE 100-FOOTER

Among the many craft that will be seen in New York waters in the early season of 1930 will be the 100 by 19-foot cruiser Sunshine III designed and built by the New York Yacht Launch & Engine Company for Harvey W. Harper of Newark, New Jersey, and shown in an accompanying illustration.

This yacht is of the usual high class construction as produced by this company and the pleasing appearance is the result of a long experience in designing and building.

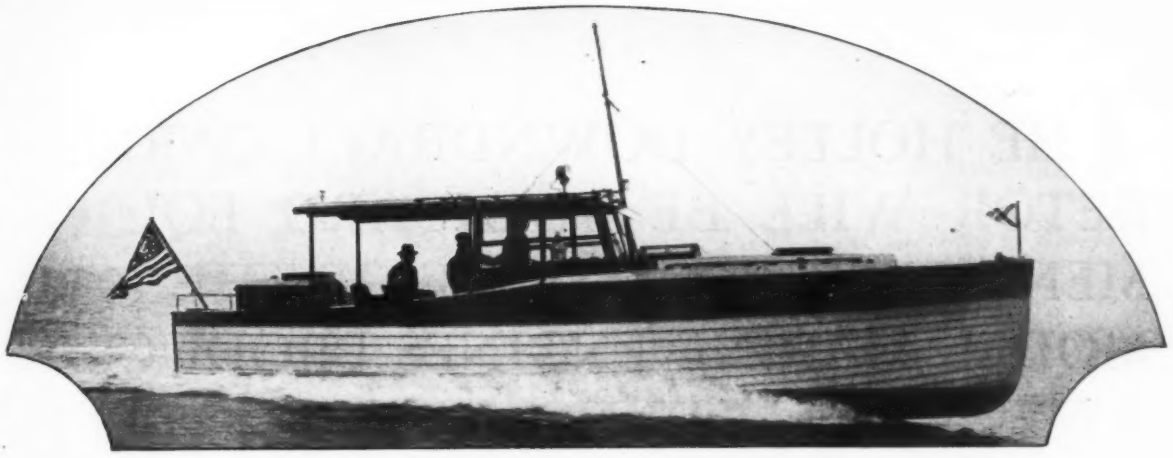
Sunshine has a double-planked hull of cedar and mahogany. The houses and decks are of teak on the outside and mahogany inside. The owner's quarters consist of two double staterooms and two single staterooms and three bathrooms. The forward deckhouse is used as a dining saloon and the after deckhouse is a living saloon.

The boat is twin screw and is equipped with two 200 h.p. Winton Diesel Motors and will have a speed of about 16 miles per hour. Some of the other equipment consists of the American Engineering Company windlass and boat hoist; Winton generators, Exide batteries, Decatur pressure water system, Curtiss Ejector foilets, Mott plumbing, Kelvinator Refrigerator, etc.

Sunshine will be used by Mr. Harper in cruising on Long Island Sound during the coming season.

(*Continued on page* 138)

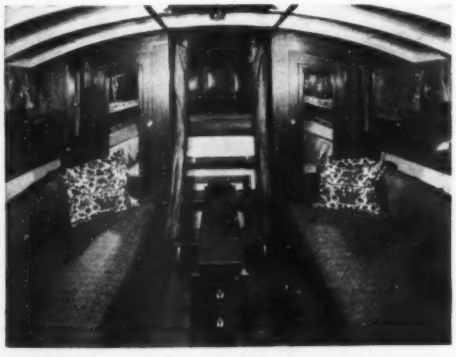
Advertising index will be found on 3rd last page



Johnson 38

America's Finest Sea-Skiff Cruiser

See it at the Show!



Looking aft in the main cabin. Note wide berths, folding table with drawers, two large mirrors and clothes lockers

Looking forward in main cabin towards galley and lavatory

IF you want the maximum in safety, seaworthiness and comfort that can be built into a thirty-eight-footer, you will be more than merely interested in the 1930 Johnson Thirty-Eight Foot Sea-Skiff Cruiser. You will make this rugged and fast boat your pleasure ship not only for the coming season, but for many years after.

The Johnson Thirty-Eight Foot Sea-Skiff Cruiser will be available in both double and single cabin models, sleeping six to eight people, and with either single or twin-screw power plants, having speeds up to 32 miles per hour.

Equipment includes every essential accessory, from boat hook to ship's clock and barometer. Every item of equipment, like the quality of material and workmanship in the hull itself, is the finest that money can buy. For example: all hardware is Crodon plated, the shafts are Monel metal with Goodrich Cutless bearings. You even have a built-in Lux fire extinguishing system. And, in addition to this equipment you have all of the necessary furnishings, including bed linen, blankets, table linen, silverware, china, cooking utensils, glassware, port curtains, carpet and curtains separating berths. In fact, to start cruising you need only put food and fuel aboard, because everything else you need comes with the boat.

Write today for complete descriptive matter or inspect the Johnson Thirty-Eight at Spaces A-5 and A-6, Main Floor, Motor Boat Show, Grand Central Palace, New York, January 17th to 25th

HUBERT S. JOHNSON
BOAT & ENGINE WORKS
BAYHEAD, NEW JERSEY

THE HOLLEY DOWNDRAFT CARBURETOR WILL BE STANDARD EQUIPMENT ON ONE OR MORE OF THE 1930 MODEL MARINE ENGINES PRODUCED BY THE FOLLOWING:

Chrysler Corporation - - - - - - - - - Detroit, Michigan

Consolidated Shipbuilding Corp. - - Morris Heights, N. Y.

Gray Marine Motor Corporation - - Detroit, Michigan

Kermath Manufacturing Co. - - - - Detroit, Michigan

J. W. Lathrop and Company - - - - Mystic, Connecticut

Scripps Motor Company - - - - - - - Detroit, Michigan

Chris Smith & Sons Boat Co. - - - Algonac, Michigan

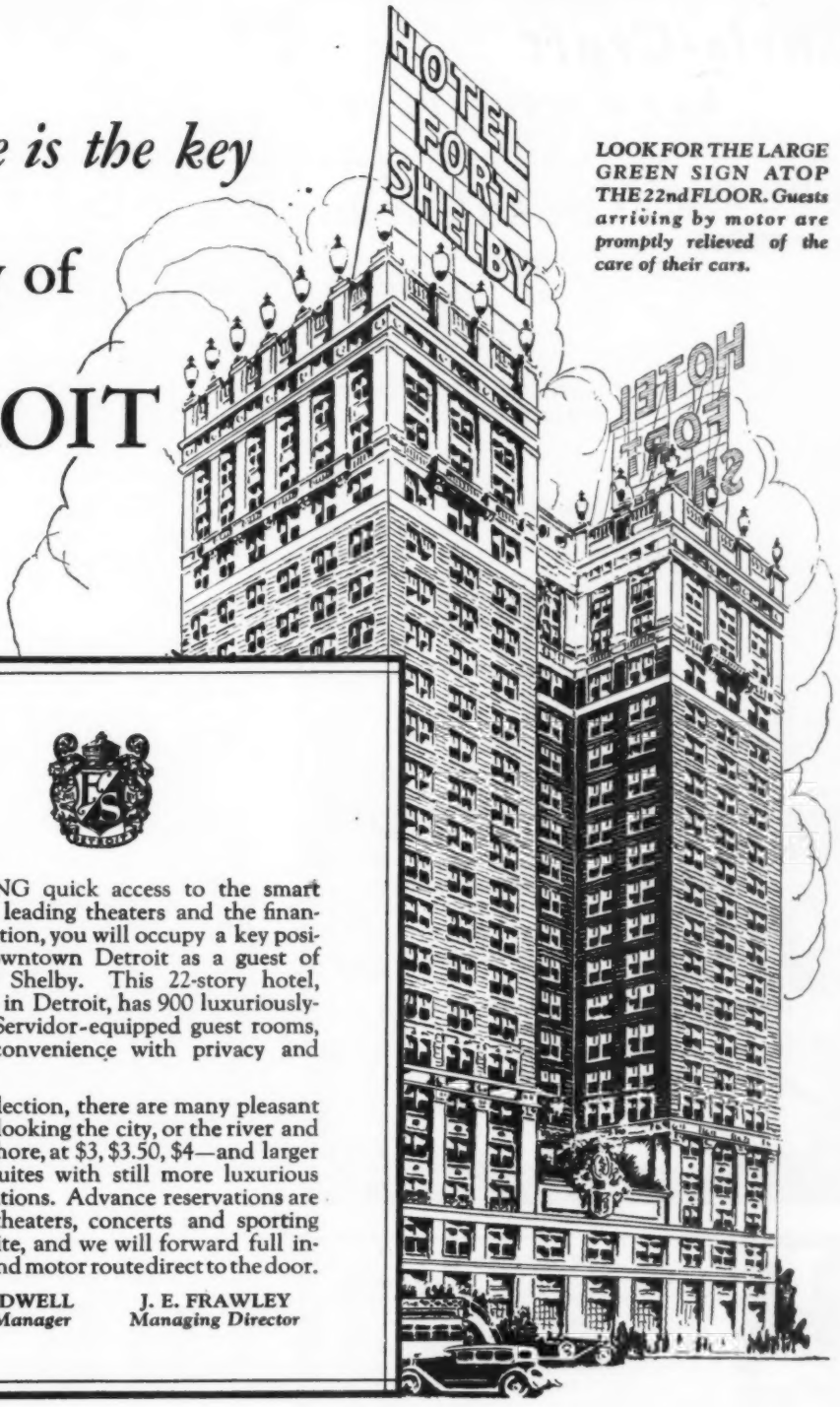
BOAT OWNERS—If you are interested in obtaining more power, write direct to the manufacturer of your engine concerning the Holley Downdraft Carburetor

HOLLEY CARBURETOR COMPANY

DETROIT, MICHIGAN

Advertising index will be found on 3rd last page

And here is the key to the city of DETROIT



LOOK FOR THE LARGE GREEN SIGN ATOP THE 22nd FLOOR. *Guests arriving by motor are promptly relieved of the care of their cars.*

ENJOYING quick access to the smart shops, leading theaters and the financial section, you will occupy a key position in downtown Detroit as a guest of Hotel Fort Shelby. This 22-story hotel, preeminent in Detroit, has 900 luxuriously-furnished, Servidor-equipped guest rooms, providing convenience with privacy and quietude.

For your selection, there are many pleasant rooms overlooking the city, or the river and Canadian shore, at $3, $3.50, $4—and larger rooms or suites with still more luxurious accommodations. Advance reservations are made for theaters, concerts and sporting events. Write, and we will forward full information and motor route direct to the door.

E. J. BRADWELL
Resident Manager

J. E. FRAWLEY
Managing Director

HOTEL FORT SHELBY

LaFayette and First

DETROIT

Chris-Craft

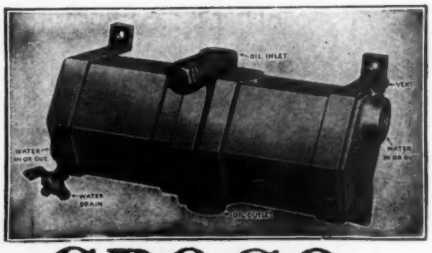
has a word to say —about the

Chris-Craft

Groco Cooler

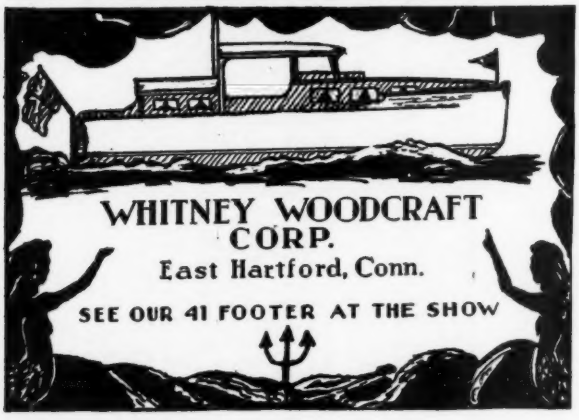
"We have used your oil cooler for sometime on our Chris-Craft Marine Motor, and we are very much pleased with it."

GROSS MECHANICAL LABORATORIES
Baltimore, Md.



In the marine field there are more Groco Oil Coolers sold than all others combined.

GROCO
REGISTERED U.S. PATENT OFFICE
OIL COOLERS



TANKS

For Storage of
GASOLINE, OIL or WATER
Made to Order

No matter what your tank problem, we are ready to meet your requirements for special shaped tanks in galvanized steel, monel metal or copper. Our engineering department will be glad to assist you. Also a large supply of standardized tanks in many sizes carried in stock for prompt shipment.

RUDDERS, STACKS, SPECIAL WORK GALVANIZING

L. O. KOVEN & BROTHER
Incorporated
154 Ogden Avenue Jersey City, N. J.

YARD AND SHOP

(*Continued from page* 134)

YACHTING MORE THAN A RECREATION

According to a recent issue of the Bulwark, monthly publication of Henry J. Gielow, Inc., naval architects and engineers, yachting proves to be more than a mere form of recreation, which comparatively few may enjoy—that is, in the use of large craft—it is found rather by many captains of industry to be a distinct business asset. Many of them find that most of their constructive ideas come to them while at play rather than at work and accordingly it is not very difficult to visualize the part which yachting plays in their business activities.

One yachtsman in particular, W. T. Grant, who started with a small store in Lynn, Massachusetts a few years ago and has since succeeded in building up within a comparatively short space of time a chain of more than 200 stores, spends a great part of his time in taking life easy, particularly in yachting. He owns a houseboat and a sailing yacht. When he does go to his office it is not so much to tie himself down to a great deal of tedious work as it is to unload a store of fresh ideas and policies which have accumulated in his hours of recreation.

Some executives find that their best thinking is done on their morning walk to the railroad station; others while reposing at the fireside in their libraries; but most of them agree that their most valuable thoughts come to them when in an atmosphere free from annoying interruptions. There can be no question but that the yacht is an ideal means of providing such an atmosphere, thereby entitling it to be listed as a real and vital business asset.

DART BUILDING BIG WAREHOUSE

An accompanying picture shows the steel framework for the new warehouse and storage plant of Dart Boats Incorporated, necessitated by their excellent business during the past year. In the background can be seen a part of the main factory which comes almost to the water's edge.

The new Dart storage plant and warehouse in frame

Lt. Commander Webb C. Hayes reports that even larger space will be necessary during the coming season and contemplates erecting a separate building for offices and supply department, turning over their present offices entirely to manufacturing space.

During 1930 it is the intention of Dart Boats to concentrate on the same models as in 1929 which included 18½, 22½, 26 and 30-foot models.

USE MARINE GLUE PROPERLY

Grief, disappointment and misunderstanding can be avoided in using marine glues if care is taken at the start in getting the right glue for the particular job in hand. Marine glues are highly specialized. There is a particular grade for each particular job. For instance, a glue for use on batten seams and double-planking would be of little use for laying canvas. It is well for the amateur builder or repairman to inform himself of the qualities of each grade and follow the instruction book which L. W. Ferdinand & Co., 152 Kneeland Street, Boston, Mass., distributors of Jeffery's Marine Glues, will gladly send you for the asking.

(*Continued on page* 142)

Advertising index will be found on 3rd last page

TWENTY-NINE FEET of BEAUTY, SPEED, QUALITY & COMFORT!

THE new 1930 Richardson Cruisabouts are everything you have dreamed about, and want, in a cruiser.

They're 29 feet long, 8 feet 10 inches beam, 2 feet 4 inches draft, and are built in three models—the Single Cabin Cruisabout, the Double Cabin Cruisabout and the Day Cruisabout —each a craft of beauty, speed, quality and comfort.

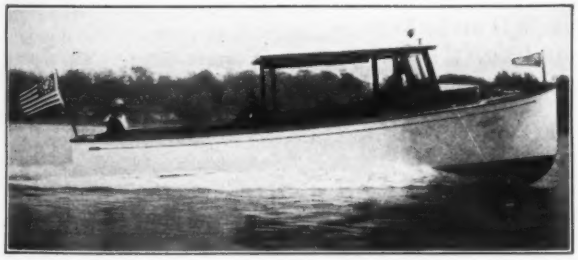
The Single Cabin Cruisabout is a 50/50 day and cruising boat. In it you will find a cockpit 10 feet long and a luxurious cabin with every accommodation for four people.

The Double Cabin Cruisabout has berths for four in the large main cabin forward, a cockpit large enough for a dozen people, and a stateroom cabin with berths for two at the stern. This Cruisabout is a kitchenette apartment especially suited for a family.

The Day Cruisabout with shelter cabin is the play boat of the Richardson fleet—ideal for hunting, swimming, fishing, ferry and yacht tending service. It skips over the water at 18 real miles an hour when equipped with a 100 H.P. Motor.

Be sure to inspect the Cruisabouts at Space B-6 at the Silver Anniversary Motorboat Show or at the dealers listed below. Descriptive catalog "E-30" mailed free on request.

RICHARDSON BOAT COMPANY, INC.
349 SWEENEY STREET, NORTH TONAWANDA, N. Y.



CRUISABOUTS ARE DISPLAYED BY

Bruns-Kimball & Co., 5th Ave. and 15th St., New York City; 102 So. 4th St., Philadelphia, Pa.; Volney E. Lacey, Charlotte Sta., Rochester, N. Y.; Henry Pohl, Inc., On the Causeway, Miami, Fla.; F. D. Homan, 78 Riverside Ave., Amityville, L. I., N. Y.; N. J. Shea, 1424 Lauderdale Ave., Lakewood, Ohio; George Bender, Erie Yacht Club, Erie, Pa.; Belle Isle Boat & Engine Co., 8777 E. Jefferson Ave., Detroit, Mich.; Electric Supply Co., 210 21st St., Galveston, Texas; Walter H. Moreton Corp., 1043 Commonwealth Ave., Boston, Mass.; A. M. Deering, 1454 Builders Bldg., Chicago, Ill.; T. B. F. Benson, 371 Bay St., Toronto, Ont., Canada; C. O. Horstman, 813-15 So. Washington St., Peoria, Ill.

Richardson 1930 Cruisabouts

AMERICAN MOTOR BOAT RECORDS

(Continued from page 20)

MILE TRIALS, NAUTICAL MILES

CLASS B, DIVISION I

Baby Brontosaurus II, driven by Bill Lyon, at Newport Beach, Calif., Oct. 6-7, 1929. Built by Crandall Boat Co. Johnson 16 engine. Speed 36.185 nautical m.p.h.; 41.613 statute m.p.h.

CLASS B, DIVISION II

Salome, driven by A. G. Martin, at Newport Beach, Calif., Oct. 6-7, 1929. Built by F. V. Pierce. Johnson 16 engine. Speed 36.063 nautical m.p.h.; 41.472 statute m.p.h.

CLASS C, DIVISION I

Bossert Pirate, owned by Walter Peterssen, at Albany, N. Y., July 5, 1929. Built by Bossert. Evinrude engine. Speed 34.05 nautical m.p.h.; 39.15 statute m.p.h.

CLASS C, DIVISION II

Black Maria V, driven by Al Thomson, at Newport Beach, Calif., Oct. 6-7, 1929. Built by Al Thomson. Evinrude C engine. Speed 37.058 nautical m.p.h.; 42.617 statute m.p.h.

CLASS D, DIVISION I

Big Ben, owned by Harold Chapman, at Albany, New York, July 5, 1929. Built by Hallock. Johnson engine. Speed 38.09 nautical m.p.h.; 43.80 statute m.p.h.

CLASS D, DIVISION II

Blue Streak, driven by H. G. Ferguson, at Newport Beach, Calif., Oct. 6-7, 1929. Built by Lake Elsinore Boat Works. Johnson 32 engine. Speed 41.503 nautical m.p.h.; 47.728 statute m.p.h.

FIVE MILES

CLASS A, DIVISION

Strange Interlude, owned by James Sullivan, at Boston, Mass., Oct. 5, 1929. Built by Porteus. Lockwood engine. Speed 23.29 m.p.h.

CLASS A, DIVISION II

B2, driven by A. E. Sutherland at Worcester, Mass., May 30, 1929. Built by Herbst. Lockwood engine. Speed 25.50 m.p.h. (4)

CLASS B, DIVISION I

Sweet 16, driven by N. C. Blanchard, at Cross Lake, La., August 4, 1929. Built by Ashbridge Boat Works. Johnson engine. Speed 36.95 m.p.h.

CLASS B, DIVISION II

Ohkay, driven by H. S. Ferguson, at Peoria, Ill., Oct. 15, 1929. Built by Lake Elsinore Boat Works. Johnson engine. Speed 40.43 m.p.h.

CLASS C, DIVISION I

Vagabond, driven by B. A. Wheeler, Salton Sea, Calif., Dec. 14-15, 1929. Built by Elsinore. Evinrude engine. Speed 41.09 m.p.h.

CLASS C, DIVISION II

Blue Streak, driven by H. G. Ferguson, Salton Sea, Calif., Dec. 14-15, 1929. Built by Elsinore. Evinrude engine. Speed 42.35 m.p.h.

CLASS D, DIVISION I

Peggy Lee, driven by Floyd Hodges at Cross Lake, La., August 4, 1929. Built by Ashbridge Boat Works. Johnson engine. Speed 41.06 m.p.h.

CLASS D, DIVISION II

Blue Streak, driven by H. G. Ferguson, Salton Sea, Calif., Dec. 14-15, 1929. Built by Elsinore. Johnson engine. Speed 45.34 m.p.h.

CLASS E, DIVISION I

Thoroughbred Baby, owned by Col. S. Tooey, at Boston, Mass., October 5, 1929. Fay & Bowen boat, Johnson engine. Speed 34.82 m.p.h.

CLASS E, DIVISION II

Ludington, driven by J. Dunnell, at Worcester, Mass., May 30, 1929. Ludington boat, Johnson engine. Speed 40.36 m.p.h. (5)

SIX MILES

CLASS B, DIVISION I

Crandall Comet, driven by Charles Adams, at Newport Beach, Calif., Oct. 27, 1929. Built by Crandall Boat Co. Johnson engine. Speed 34.269 m.p.h.

CLASS B, DIVISION II

Blue Streak, driven by H. G. Ferguson at Elsinor, Calif., July 28, 1929. Built by Lake Elsinore Boat Works. Johnson engine. Speed 40.54 m.p.h.

CLASS C, DIVISION I

Blue Streak IV, driven by Chuck Hall, Lake Elsinore, Calif., July 28, 1929. Built by Lake Elsinore Boat Works. Johnson engine. Speed 37.75 m.p.h.

CLASS C, DIVISION II

Blue Streak IV, driven by H. G. Ferguson at Lake Elsinore, Calif., July 28, 1929. Built by Lake Elsinore Boat Works. Johnson engine. Speed 40.63 m.p.h.

CLASS D, DIVISION II

Blue Streak, driven by H. G. Ferguson, at Newport Beach, Calif., Oct. 27, 1929. Built by Lake Elsinore Boat Wks Johnson engine. Speed 43.584 m.p.h.

CLASS E, DIVISION I

Ceestepper, driven by L. E. Preston at Red Bank, N. J., August 25, 1929. Built by Penn Yan Boat Works. Johnson engine. Speed 40.227 m.p.h.

TEN MILES

CLASS B, DIVISION II

Crandall Comet, driven by Charles Holt, at Salton Sea, Calif., Dec. 14-15, 1929. Built by Crandall Boat Co. Johnson engine. Speed 38.83 m.p.h.

CLASS C, DIVISION I

Miss Genn III, owned by Robson Cupplls, at White Rock Lake, Dallas, Texas, Sept. 8, 1929. Built by R. Allen Smith. Evinrude engine. Speed 40.089 m.p.h.

CLASS C, DIVISION II

Blue Streak II, owned by L. Baughman, driven by H. G. Ferguson, at San Diego, Calif., Dec. 16, 1928. Built by Holt. Evinrude engine. Speed 38.59 m.p.h. (B)

CLASS D, DIVISION I

I'm Alone, owned by E. Widegren, Oyster Bay, N. Y., Sept. 29, 1929. Built by D. N. Kelley Co. Johnson motor. Speed 47.36 m.p.h.

CLASS D, DIVISION II

Blue Streak IV, owned by Dr. Baughman, at Lake Elsinore, Cal. Sept. 22, 1929. Built by Lake Elsinore Boat Works, Johnson engine. Speed 44.12 m.p.h.,

CLASS E, DIVISION II

Miss Mystery, owned by L. F. Davids, at Boston, Mass. Oct. 5, 1929. Built by Fay & Bowen, Johnson engine. Speed 40.36 m.p.h.

FIFTEEN MILES

CLASS B, DIVISION I

Crandall Comet, driven by Chas. Adams, at Newport Beach, Cal. Oct. 27, 1929. Built by Crandall Boat Co. Johnson engine. Speed 37,383 m.p.h.

CLASS B, DIVISION II

Blue Streak, driven by H. G. Ferguson at Lake Elsinore, California, July 28, 1929. Built by Lake Elsinore Boat Works, Johnson engine. Speed 40.40 m.p.h.

CLASS C, DIVISION I

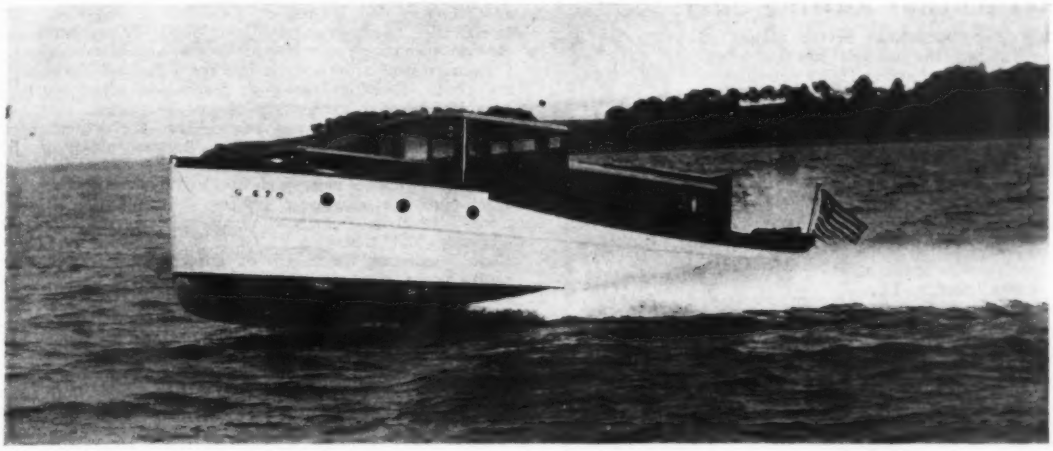
Vagabond, driven by B. A. Wheeler at Newport Beach, Cal. Oct. 27, 1929. Built by Lake Elsinore Boat Works. Evinrude engine. Speed 35.785 m.p.h.

CLASS C, DIVISION II

Blue Streak IV, driven by H. G. Ferguson, at Lake Elsinore, Cal., July 28, 1929. Built by Lake Elsinore Boat Works, Johnson engine. Speed 40.31 m.p.h.

CLASS D, DIVISION II

Blue Streak, driven by H. G. Ferguson, at Salton Sea, Calif., Dec. 14-15, 1929. Built by Lake Elsinore Boat Works. Johnson engine. Speed 44.92 m.p.h.



Toppan Champion Llenroc II, 32½-foot Express Cruiser, a consistent winner year after year of most important ocean events, built by Toppan Boat & Engine Co., Medford, Mass. Toppan Boats are finished with Climax Boat Paints.

Leading Boat Builders Choose Climax Paints

TOPPAN Cruisers are champion boats, the result of attention to every detail. Champion paints are absolutely necessary in boats of this type.

CLIMAKOTE, for priming and surfacing, is the most spectacular discovery in marine paints in recent years. It builds up in fewer coats and yields a glass smooth, tough, elastic and resistant flat white surface. Three coats can be applied in a working day. Only the final coat need be sanded.

This extraordinary paint product can be manipulated to meet any requirement of speed, economy and fine finish. Mixed with CLIMAX YACHT WHITE it reduces gloss in any degree desired, down to absolute flatness.

CLIMAX YACHT WHITE straight or with CLIMAKOTE has exceptional covering quality and whiteness.

CLIMAX BOTTOM PAINTS, used exclusively on the phenomenally fast Toppan Cruisers, were selected because they are not only positively anti-fouling, but because they give a hard, smooth, low resistance finish that stands the gaff of speed.

Tests will prove every CLIMAX claim. Proofs and samples on request.

THE CLIMAX CLEANER MFG. CO. · CLEVELAND, OHIO

New England Office: 282 Moody St., Waltham, Mass.

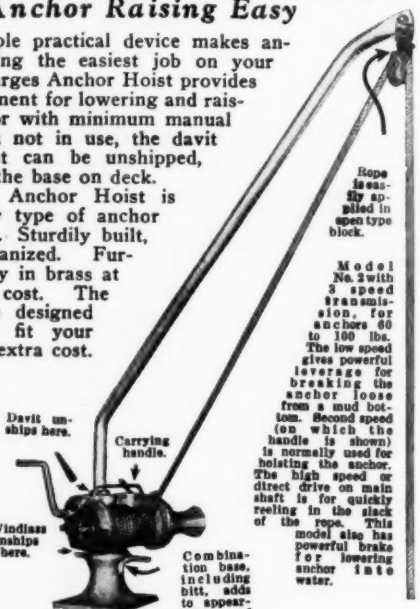
CLIMAX BOAT PAINTS

STURGES ANCHOR HOIST

Easily installed by anyone without disfiguring or marring your cruiser in any way.

Makes Anchor Raising Easy

THIS simple practical device makes anchor raising the easiest job on your boat. The Sturges Anchor Hoist provides every requirement for lowering and raising the anchor with minimum manual effort. When not in use, the davit and the hoist can be unshipped, leaving only the base on deck. The Sturges Anchor Hoist is made for any type of anchor up to 100 lbs. Sturdily built, heavily galvanized. Furnished entirely in brass at slight extra cost. The davit can be designed especially to fit your boat without extra cost.


Rope is easily applied in open type block.
Model No. 2 with 3 speed transmission, for anchors 60 to 100 lbs. The low speed gives powerful leverage for breaking the anchor loose from a mud bottom. Second speed (on which the handle is shown) is normally used for hoisting the anchor. The high speed or direct drive on main shaft is for quickly reeling in the slack of the rope. This model also has powerful brake for lowering anchor into water.
Made in three different sizes.
You will be surprised at the many features of the Sturges Anchor Hoist. Let us explain them to you. Write today for details and prices.
Davit unships here.
Carrying handle.
Windlass unships here.
Combination base, including bitt, adds to appearance of boat.
Patent Applied For

We also manufacture a special hoist for handling outboard motors.

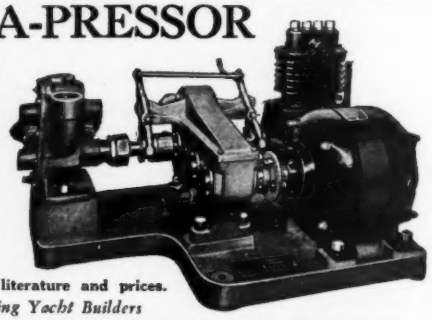
STURGES ANCHOR HOIST
3 Kensington Road. Bronxville, N. Y.

AQUA-PRESSOR

A combined air compressor and pump unit of rugged construction and many uses.

Furnished with either 32 or 110 volt motor. Can also be had with compressor only.

Manufactured by the makers of Hi-Duty Direct connected pumps.



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REGAL MARINE ENGINES

EIGHTEEN MODELS

2 H.P. to 75 H.P. **One to Six Cylinders**

Built to give years of constant service at the lowest cost.

Equipped with high speed reversing gear and Link Belt silent chain drive for timing gears.

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REGAL GASOLINE ENGINE COMPANY
Established 1901
74-82 WEST PEARL ST. COLDWATER, MICHIGAN
Manufacturers of REGALITE ¾ K.W. air-cooled electric lighting plant.

YARD AND SHOP

(*Continued from page* 138)

HUDSON ESTATE BOUGHT FOR YACHT CLUB

The 733-acre estate of the late J. Pierpont Morgan, known as Cragston, and located on the Hudson River just south of West Point, has been acquired by a group of yachtsmen who propose to spend approximately a million and a half dollars in developing it and converting it into the Cragston Yacht and Country Club. Facilities for golf, tennis and other sports will be provided as well as for yachts and seaplanes.

This particular site was selected for the project because of the exquisite landscape, the historic atmosphere of the place and also the accessibility of the location to New York by water. Members will be restricted by invitation and the directorate will approve applications. Officers and Board of Directors include F. Calvin Demarest, president; Charles W. Hickernell, secretary and treasurer; Charles F. Chapman and Henry P. Pope. Assisting the Board of Directors, there will be an advisory board composed of E. C. Huntington, Jr., J. F. Sanderson, Lady Archer-Shee, E. Arthur Carter, F. C. Reynolds, B. McManamy, Jr., W. S. Hawkins, Judge W. W. Dey, McClelland Barclay, L. C. Stowell, J. C. Demarest, J. E. Hasbrouck, Brig. Gen. M. F. Davis, W. P. Hawley, and C. A. Pugsley.

Yachtsmen have been desirous for a number of years of establishing a complete country club in connection with yachting in the vicinity of New York and many plans were abandoned because of the cost of deep water frontages. Seaplanes and commuting yachts capable of high speeds will bring the Cragston property, less than fifty miles from the heart of New York City, within commuting distance.

According to an announcement by Secretary Hickernell, a regular scheduled speed-boat service will be established from downtown New York City to the club. There also will be a regular seaplane service, enabling members to reach the club in less than 30 minutes from the city. The speed boat service planned from the city to the club at cost for members and their guests probably will be under the supervision of Charles F. Chapman, editor of MoToR BoatinG and a director of the club.

Clarence Chamberlain, noted trans-Atlantic flier, is a member of the club and acts as chairman of the club's airplane transportation committee. The announcement said that the club plans the purchase of one or more amphibian planes for fast transportation for members from the downtown area.

BOATING INDUSTRY ON TIME PAYMENTS

By F. M. NICODEMUS

DEFERRED payment sales of stock boats are rapidly increasing and the time is not far distant when stock boat dealers will rely to a great extent upon the instalment principal to maintain the large volume of business that they are going to do.

Rapid advancement has been made by the stock boat industry toward the adoption of instalment selling during the past year. Many manufacturers have selected strong finance companies through which their dealers' deferred payment sales paper may be swiftly discounted. But there are rough spots in the path of perfection that must be ironed out before any great volume of time selling can be done.

Dealers must be taught how to sell on time. Just because they have a finance connection does not mean that they are going to sell a lot of boats. If prospective boat buyers do not know and are not told that they can buy on time there is nothing left for the prospect to assume but that the boat can only be bought for cash. If that is the case and the cash consideration cannot be conveniently met—no sale.

Another impediment that the boat industry must overcome is the problem of letting the public know that boats can be bought on time. This is really an advertising and sales promotion job. It has already been started by some boat manufacturers; but the surface has only been scratched. As soon as the importance of it is realized, however, the necessary promotional programs will no doubt be gotten under way. Then will boat dealers capitalize on the many possibilities of the time payment selling principle.

And what are these possibilities that instalment selling offer the boat dealer? It has been ably shown with the motor industry as an example that mass production has materially lowered unit costs. Instalment sales made possible mass production— more than sixty percent of all automobiles sold are sold on time. Just so, when instalment selling makes mass production in the boat industry a factor of consequence, the cash price of boats will

(*Continued on page* 144)

Advertising index will be found on 3rd last page

THE OUTSTANDING VALUE IN THE SILVER ANNIVERSARY BOAT SHOW

16 FOOT RUNABOUT $945

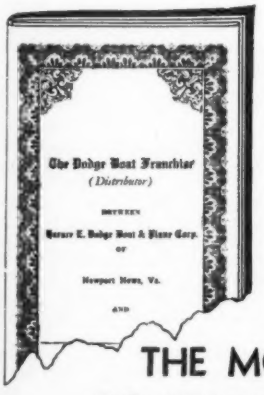
Seam-battened throughout, double-bottom of African mahogany, with glue impregnated canvas between skins, the 16 foot Dodge runabout is built with the same high quality as other Dodge fine boats. 16 feet long at the waterline, with a 5 foot 3 inch beam and 16 inch draft, it has a capacity for five. Powered by Lycoming with a 40 horse power, 4 cylinder motor, it makes a speed of 25 miles an hour. Price, *fully equipped*, $945, F. O. B. factory.

21 FOOT RUNABOUT . . $2100

Unusual performance is the feature of the new Dodge 21 foot runabout. Slightly oversize with a length of 21 feet 2 inches at the waterline, and a beam of 6 feet 3½ inches, the 21 footer carries six passengers. It is powered by Lycoming, with a straight eight, 115 horse power motor, and has a speed of 25 miles an hour. It is priced, with unusually luxurious equipment, at $2100, F. O. B. factory.

25 FOOT RUNABOUT $2500

There are three 25 foot models in the new Dodge fleet. Model 3, powered by Lycoming with a straight eight 125 horse power motor, has a speed of 32 miles an hour. Model 4, with a 165 horse power motor, a straight eight by Lycoming, makes 38 miles an hour. Model 10 Sedan, with a straight eight, 165 horse power Lycoming motor, makes 34 miles an hour. Prices, F. O. B. factory: Model 3, $2500; Model 4, $3200; Model 10 Sedan, $3900.



28 FOOT RUNABOUT $3700

The Model 5 is a Dodge 28 foot runabout powered by a Lycoming straight eight, 165 horsepower motor, with a speed of 32 miles an hour. Model 6, with a 300 horse power 12 cylinder Lycoming motor, makes 45 miles an hour. The De Luxe Sedan, Model 11, makes 38 miles an hour with a 300 horse power Lycoming motor. Prices, F. O. B. factory: Model 5, $3700; Model 6, $4500; Model 11 Sedan, $5300.

THE MOST VALUABLE PIECE OF PAPER IN THE RETAIL BOATING FIELD

The great opportunity for Dodge Dealers is not alone in offering the most value at the lowest cost. One reason why the Dodge franchise is the most valuable piece of paper in the retail boating field, is the Dodge reputation for fair and honest relationships with dealers. The Dodge franchise is like a dollar bill, you can take it at face value. It is not subject to any special agreements. Unwritten, but just as valuable, is the Dodge reputation for fair dealing. Write for information about open territories.

THE NEW DODGE FLEET

HORACE E. DODGE BOAT AND PLANE CORPORATION, Sales Office, 3 East 52nd St., New York

PHILIPPINE MAHOGANY

The Premier Boat Building Wood

2,000,000 feet

In Stock

All Thicknesses

Dry . . . For quick shipment by steamer or rail direct from New York.

Any Quantity

From one board to a carload.
Wood practically Clear.
Good widths and lengths.

Let us quote prices

BLACK & YATES, INC.

Paramount Building

Times Square **New York, N. Y.**

Phone: Longacre 1345

***Yard:* Brooklyn, N. Y.**

Powerful Searchlight

Fig. 498

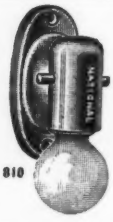


Fig. 810

We manufacture a complete line of Poweray and Lebby Searchlights, running lights and cabin fixtures, outboard specialties and marine type electric house fixtures. Ask for National Marine Products at your dealer—look for the Trade Mark. Write for circular to Dept. G.

The National Marine Lamp Co.
FORESTVILLE, CONN., U. S. A.

ATLANTIC RADIO & MARINE CO.

INCORPORATED

20 Brookline Avenue **Boston, Mass.**

New England Distributors for:

CHRYSLER ENGINES

AND

HERBST, HOOTON AND LYMAN BOATS, SKI-BOARDS, LOCKWOOD MOTORS, CORSAIR CRUISERS, DART RUNABOUTS, STEARNS ENGINES, UTE GARMENTS, KASSON LUBRICATING COMPOUND, DUPLEX MARINE OIL.

YARD AND SHOP

(*Continued from page* 142)

be lowered—more sales for the boat dealer resulting. Secondly, a deferred payment price quoted often induces consideration for the purchase of a product that a cash quotation would hardly inspire. Nor is it true, as many suppose, that this is so because people cannot afford to pay cash. Finally, instalment selling of boats will have a tendency to keep up boating interests in the winter. One dealer of our acquaintance put out a series of letters to prospects explaining the convenience of buying boats on time; paying from income during the winter months and having the boat practically paid for when delivery is to be made in the spring. This dealer now has eleven people paying for boats they will not get until the spring of 1930.

Selling boats on time is presumed by some boat dealers to be horribly complicated. To the contrary, it is exceedingly simple in explanation and understanding. It is difficult only to the indifferent—those who have never given it due consideration.

Now what about this finance charge—does it not amount to more than the so-called legal rate of interest?

The question is hardly appropriate. It does not apply to finance companies but rather to banks. Banks loan money and charge interest—finance companies render a service extending as a rule far beyond the scope of banks and their charges when analyzed are usually quite fair. To begin with, their money comes largely from banks at bank interest rates. The charge must include this as well as the cost of insurance, cost of credit investigation, cost of making collections, cost of paying management expense and still allow a small margin for profit.

Few purchasers of boats on the instalment plan will question the financing costs. What they are largely interested in is: How much do I have to pay down and what will the monthly payments be? If the answer demonstrates these requirements to be within the prospect's means the sale usually is made right then and there with very little, if anything, ever said about finance charge.

And why do people pay this charge of the finance company instead of going to their bank and borrowing the money at bank interest rates? For two reasons: Finance companies play a much needed part in the economic scheme of things for those who have not established their credit at a bank and for those who prefer to use their banking facilities for other purposes. Finance companies pass credits on merchandise collateral—such as boats—which banks do not as a rule accept as security for personal loans; also upon the moral risk represented by the buyer whose resources are not enough to earn him a line of bank credit.

With the large finance companies of the country so organized and trained in their methods as to insure prompt handling of reports, credits, collections and the like, and with branch or service offices at strategic points throughout the country, the boat manufacturer has financing facilities at his finger tips second to none ever before offered an industry. But two things remain for the boat manufacturer to do to assure himself a larger volume of deferred payment business: Tell the public that his boats are available on a reputable finance plan and teach his dealers how to sell on a time payment basis.

TWO NEW DIESEL YACHTS LAUNCHED

Cox & Stevens, Inc., naval architects of New York, report the following launchings of new diesel yachts designed by them, both being vessels in which the yachting public has taken unusual interest.

On November fifteenth Lotosland, which is being built for Colonel E. A. Deeds, a Director of the National City Bank and an important figure in the world of engineering and aviation, was launched by the builders, Pusey & Jones, at their yard, Wilmington, Delaware, and was christened by Mrs. Deeds. Lotosland is well advanced toward completion and in the early winter will proceed to the West Indies, making her headquarters at Havana.

This new yacht, which is 205 feet in length and in appearance of the steam yacht type with clipper bow and overhanging stern, represents the most modern development in yacht design. She is equipped with two Winton Diesel engines of 500 horsepower each of special design and synchronized so as to eliminate vibration.

On November sixteenth Alice, another diesel yacht that is being built for Sir Richard A. Cooper of London, was successfully launched by the builders, Swan, Hunter & Wigham Richardson, at their yard, Newcastle-on-Tyne.

This new yacht which Cox & Stevens have designed is 179 feet in length and is typical of the modern diesel yacht as built in this country for American yachtsmen, having the graceful appearance of a steam yacht, being most luxurious in her appointments and fittings and having as her machinery plant two 400-horsepower modern diesel engines.

(*Continued on page* 146)

Banfield Twenty-Two Foot Runabout. 22 M. P. H. to 28 M. P. H. $2,750 to $3,050

BANFIELD SEA-SKIFF RUNABOUTS

$2750. AND UP

THE same sturdy mahogany lap-strake construction, the same high quality, safety features, seaworthiness and comfort that have made the Banfield 32-foot cruisers the world's foremost deep-sea boats, are now available in Banfield runabouts. Three models: Twenty-Two, Twenty-Six, and Thirty-Two Footers; seating eight to fifteen people. Speeds 22 to 38 miles per hour. Safe enough for children; fast enough for adults.

These famous boats solve the problem of tender or commuting service wherever rough water conditions must be conquered, with speed, smooth riding and absolute dryness.

Inspect the Banfield runabouts and cruisers at the National Motor Boat Show, Grand Central Palace, New York, January 17th to 25th, Space G2, Main Floor, and Space N, Second Floor, or write today for full information.

Dealers! A few valuable territories are still open. Get our proposition

BANFIELD 32 STANDARD CRUISER
The cruisers are available with single or double cabins. De Luse models have forward cockpits. Speeds 20 M. P. H. to 30 M. P. H. $5,850 to $7,950

BANFIELD SEA SKIFF WORKS INC.

SALES OFFICES AND PERMANENT EXHIBIT
277 Park Ave. Bldg. - ENTRANCE 502 LEXINGTON AVE. - New York City
PLANT: ATLANTIC HIGHLANDS, NEW JERSEY
LARGEST BUILDERS OF SEA SKIFFS IN THE WORLD

RUSSIALOID—is now used to upholster Dee-Wites

Swanky and comfortable, these racy Dee-Wite boats owe much of their swank and comfort to the wise selection of upholstery and trim. The builders, Dwight Lumber Co., specified Russialoid, the material so many boat makers are using because of its weather-resistance, beauty and durability. Russialoid is available in a variety of colors.

THE PANTASOTE COMPANY
INCORPORATED
250 PARK AVENUE, NEW YORK

YARD AND SHOP

(*Continued from page* 144)

DIESEL SUCCESSFUL IN LAKE GRAIN TRADE

The freighter Grainmotor is the first motorship to be operated by the Canada Steamship Lines and reports of its first season's operation indicate that the day of the Diesel-driven canal bulk carrier has arrived. Launched early this year, Grainmotor has performed unusually well and has proved unbelievably flexible and manoeuverable in the canals.

Immediately after her trial runs, the next afternoon in fact, she started on her first trip through the canals from Quebec to Montreal to Port Colborne and return. A complete log was kept of her engine operation during this trip and it was found that from Montreal to Port Colborne and return 1,587 signals were answered by the Diesel engine. Since there is a total of 48 locks in the Welland and St. Lawrence Canals, it will be appreciated that the power plant has been called upon to render exceptionally hard service, but there has not been a single failure to carry out a signal during these trips.

On her initial trip from Montreal to Port Colborne and return, approximately 3,000 gallons of fuel oil were consumed. On the basis of 22 trips a year, which is the average for ships in canal service, Grainmotor will have a total fuel and lubricating oil bill in the neighborhood of $5,000 per year. This is most interesting when one considers that the average fuel and lubricating oil bill for a similar steam driven canal ship is in the neighborhood of from $10,000 to $12,000 per year and often in excess of the larger amount.

Not only does Grainmotor show this appreciable saving in fuel and lubricating oil costs but in addition they have been able to dispense with the services of three firemen in the fire hole, effecting still another worth-while economy in the annual operating costs.

Grainmotor is a standard canal-sized vessel 252 feet in length, 43 feet in beam by 20 feet 6 inches molded depth. Due to the lightened dead weight through the installation of her Diesel power she has a carrying capacity in excess of 100,000 bushels of wheat, which is at least 5,000 bushels greater than the capacity of the largest steam driven grain bulk canal carrier.

The power plant consists of an 8 cylinder four-cycle Cooper-Bessemer Diesel engine of the direct reversible type developing 800 h.p. This engine gives her a speed of 11-3/4 miles per hour light and approximately 10-1/2 miles per hour loaded. In this connection it is interesting to note that this Diesel engine has an unusually slow speed for canal work. The engine turns over at 32 r.p.m., giving her a canal speed less than that of the average steam driven canal ship, and the engine can be reversed from full speed ahead to full speed astern in five seconds with the utmost ease and without the slightest undue strain on the engine.

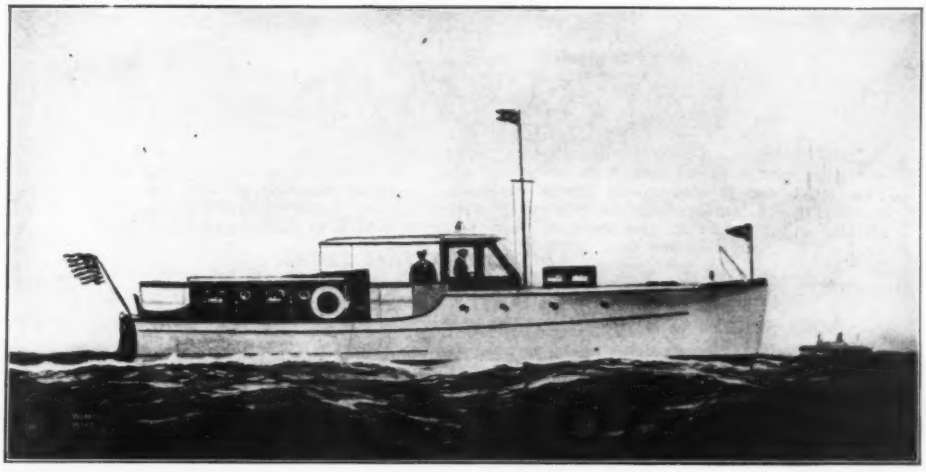
The motorship Grainmotor, owned by Canada Steamship Lines, is powered successfully with a Cooper-Bessemer diesel engine

NEW A. P. B. A. MEMBER PROPOSED

Application for membership in the American Power Boat Association has been received by the national organization from the Arizona Outboard Motor Boat Association located at 40 South Robson Street, Mesa, Arizona.

(*Continued on page* 150)

An nouncing "The Dauntless"



"Make her the finest small yacht ever built!"

THAT was the order given to experts of the Dauntless Shipyard, Inc. after this new achievement in yachting had been planned.

The results will be a revelation to you!

Beautiful, long, easy lines; joiner work of African mahogany and 100-year old walnut; planking of Phillipine Indoako; fastenings of bronze and copper.

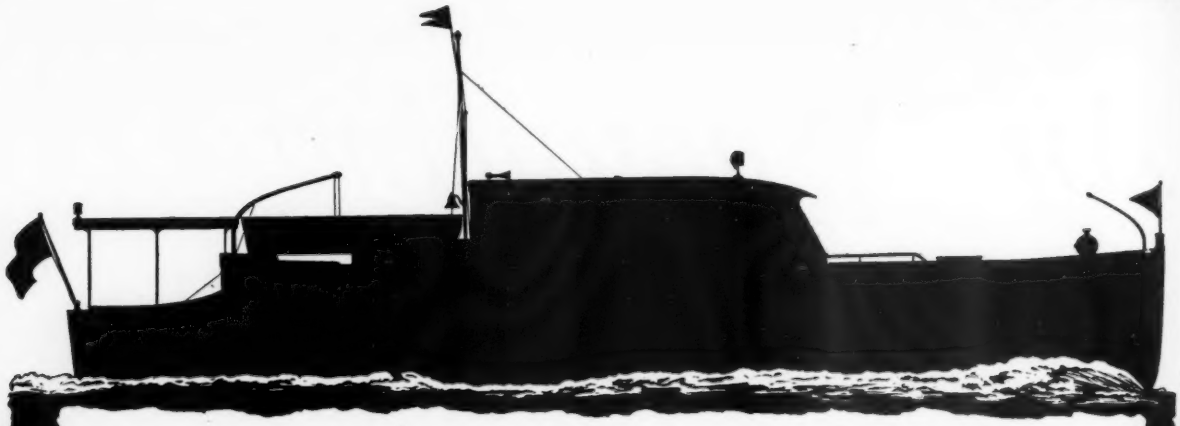
And as for comfort! Every device known to modern naval construction has been used to delight the most fastidious guest! She is superbly fitted out to the last detail, including linen and silver. There is hot and cold water throughout the ship. Her extra heavy construction and triple fire prevention system exemplify the extreme caution taken for your safety.

With hull and engine beds designed either for Diesel or gasoline power, this remarkably reasonable yacht will be on exhibition at the Motor Boat Show.

For further particulars, apply to...

MILLARD, BREWSTER & CHAMBERS
INCORPORATED
230 PARK AVENUE, NEW YORK, N. Y.

NAVAL ARCHITECTS — *Telephone VANderbilt 10167* — YACHT BROKERS



FLEETWING 50

NO PERSON can possibly describe on paper this commodious, luxurious wondercraft. You must see it and spend hours carefully comparing its innumerable conveniences with all the other boats in the market, then you will concede that the FLEETWING FIFTY is the Rolls Royce of the yachting industry.

First showing at the National Motor Boat Show, Grand Central Palace, New York,—January 17th to 25th—space A-6 Main Aisle.

DON'T MISS THIS TREAT!

FLEETWING YACHT & SHIPBUILDING CORP.

153RD STREET & HUDSON RIVER NEW YORK CITY

You are cordially invited to visit our showroom—via Subway to 157th Street, then across bridge foot of 155th Street—via auto to 158th Street and under viaduct, then back to 153rd Street.

Copper Bottom Paints

"New Jersey"

Top Side Paints

The Paints that Satisfy and Wear Longest

Booths 33 & 34 MOTOR BOAT SHOW Third Floor

Grand Central Palace, 480 Lexington Avenue, New York City
Friday, January 17th, to Saturday, January 25th, 1930

You will find our men ready and only too pleased to give you full information on boat painting.

"New Jersey" Three Leaders

Ship and Deck Paint
12 Popular Colors

Have you tried the new color, Reddish Buff? It is the best Deck Paint and wears like iron.

Copper Paint
Red-Green-Brown

Worms cannot hold on, you can haul out and find the bottom clean.

Yacht White
For exterior work

Try this paint above the waterline. Stays white, can be washed and scrubbed. Excellent for cabins.

NEW JERSEY PAINT WORKS

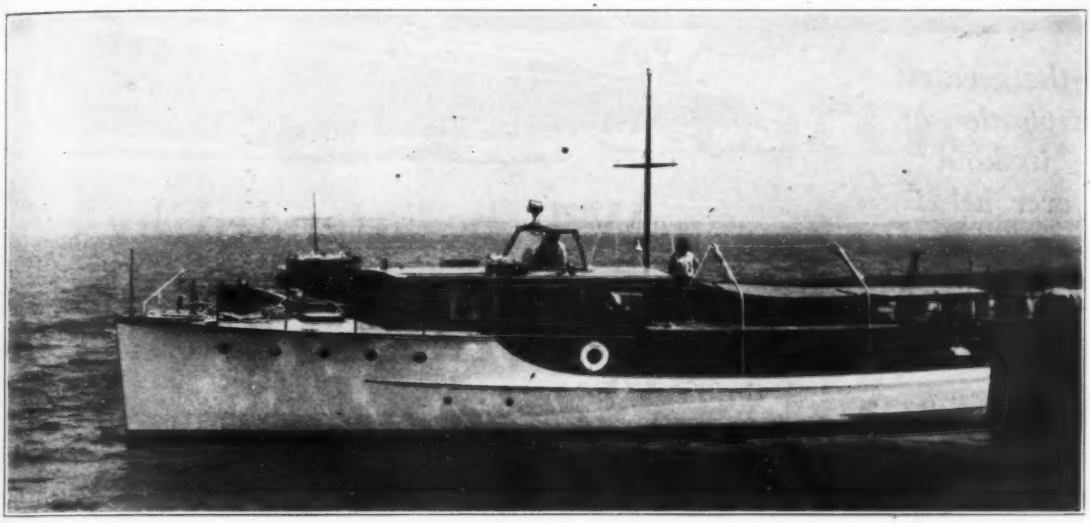
HARRY LOUDERBOUGH, INC.

WAYNE & FREMONT STS. JERSEY CITY, N. J.

Write for our 1930 Calendar

Advertising index will be found on 3rd last page

"The most satisfactory light weight high speed marine Diesel engine in my experience." Capt. J. E. Price



Equipped with Buda M.A.N. 6x8" 4-cylinder marine Diesel engine turning a 26x18"-3 blade propeller at 885 RPM. This boat has a sustained speed of 12.95 miles per hour.

Buda-M. A. N. Diesel Makes Remarkable Record

New York, N. Y.
Nov. 15th, 1929

The Buda Company
Harvey, Ill.
Gentlemen:

In reply to your letter of the 12th instant, with reference to the performance of your Buda M. A. N. Diesel engine in the Humphreys' 55 footer owned by Mr. H. Barber, I am glad to advise you that this engine made a remarkable record throughout the entire season.

This boat was put into service last spring and was used constantly throughout the entire season, including several cruises of considerable length.

As a result of my experience with this engine, I can, without hesitation, classify it as the most satisfactory light weight high speed Diesel marine engine in my experience of some thirteen years' intimate association with all kinds of Diesels.

The following facts will be of interest to you I know:

The maintenance cost of this engine for the entire season was nothing.
The lubricating oil consumption was so low as to enable me to classify it as unusual.
The repair expense for the season was nothing.
The fuel consumption averaged approximately 5¼ gallons per hour using 28° to 32° Baume fuel.
Not one fuel injection nozzle clogged or required cleaning during the entire season.
The engine was absolutely free from exhaust smoke or soot at all times, except after a long period of idling a faint blue haze would be visible. This would entirely disappear a few moments after the engine was put under load.
Not once did the engine fail to start on the button and this without any pre-heating device on the intake manifold.

You are to be congratulated on the addition of this engine to your line, and I will always be glad to recommend it to anyone interested in an engine of this type.

Yours very truly,
(Signed) James E. Price.

Capt. Price is a man of long experience with Diesel engines of all kinds and types. Prior to his connection with this boat, he was associated with Frederick Humphreys Inc. and previous to that was Supt.-Engr. of Electric Ferries Inc. an organization operating a number of Diesel equipped ferry boats. He has watched with keen interest the development of the light weight high speed Diesel engine and has had personal experience with all phases of this development so that he can be classified as an authority on the operation and maintenance of engines of this type.

Branch Offices:

30 CHURCH STREET - - - - - - - NEW YORK, N. Y.
664 MISSION STREET - - - - - - - SAN FRANCISCO, CAL.

THE BUDA COMPANY, HARVEY, { CHICAGO SUBURB } ILLINOIS

ESTABLISHED 1881

BUDA MARINE POWER

Ask for Bulletin No. 673, which gives further particulars on BUDA M.A.N. MARINE DIESEL ENGINES

NEW ENGLAND SPORTS AND BOAT SHOW

—the greatest exposition of its kind ever held!

Will be attended by 100,000 prospective buyers of sport material. Reserve your space NOW!

BOSTON GARDEN EXPOSITION HALL

FEB. 3 to 8, 1930

Auspices of

State Dept. American Legion

Write:

Sheldon Fairbanks Expositions, Inc.

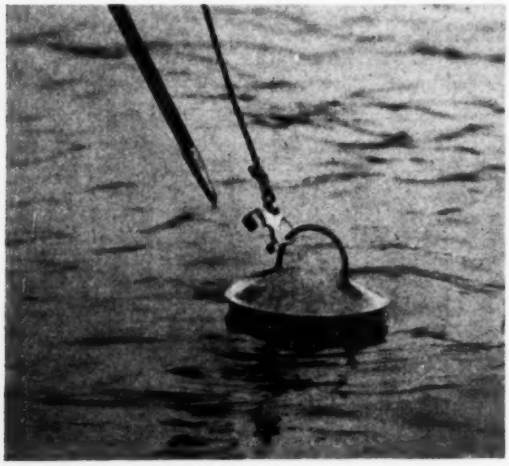
811 Metropolitan Bldg. Boston, Mass.

YARD AND SHOP

(*Continued from page* 146)

NEW AID TO MOORING

The Sturges Anchor Hoist Company located at 3 Kensington Road, Bronxville, N. Y., manufacturers of anchor hoisting devices and equipment, has recently perfected a useful little device known as the Sturges Jiffy Mooring Snap which has been designed to simplify the problem of picking up the mooring. The device consists of two parts: a fitting which is attached to the end of a pole or one end of a boat hook and a second fitting in the form of an automatic snap which fits over the ferrule on the pole. To the snap a light line is attached and an eye splice is generally worked in the other end of the line so that it may be readily dropped over the bitt. After the ferrule has been fitted to the end of the pole, all that is necessary in order to use the Jiffy Snap is to slide it on. Two small balls or locks hold it from dropping off. Then when the snap has been passed over the ring in the mooring, the pole is given a little jerk and the snap is automatically released, leaving the boat secured to the mooring by the light line. Once secured in this manner it is a simple matter for the operator of the boat to attach his regular heavy mooring line.



The Sturges Jiffy Mooring Snap simplifies the mooring problem

There are many advantages attached to the use of this device, especially for sail boats. When a sail boat misses its mooring it is necessary to come around again in order to pick the mooring up and this is not always a very simple matter in a congested anchorage. With the new mooring snap, however, a line may be run aft to a point where the man at the wheel may conveniently hook the mooring single-handed as it comes alongside.

NEW AIRUBBER SPEED BOAT PAD

The new Airubber Speed Boat Pad No. 511, which is shown in the accompanying illustration, is primarily intended for racing drivers, for use in the small high-speed outboard motor boats. It is, however, admirable for use also in slow-speed outboard motor boats and in canoes especially. Its particular advantage over the larger Airubber boat pads is the fact that the smaller size of the air chambers provides for a lower center of gravity, which is desirable in a racing boat and in canoes.

The new pad, made of strong, durable inside rubberized olive drab jean, and completely vulcanized by the Airubber patented process, is 20 by 36 inches in dimension and has ten air chambers; the weight 3 pounds 3 ounces. The chambers are all connected and the Airubber patented restricted air passage is used, which prevents rolling. Strong grommets are provided at the corners, for tying the pad fast in the boat if desired. The valve has interchangeable caps for blowing or pumping.

(*Continued on page* 158)

Advertising index will be found on 3rd last page

30,000 miles without lubrication worries

From the Caribbean to the Celebes the "Illyria" found Gargoyle Marine Oils in every port.

WHEN Cornelius Crane's motor yacht "Illyria" started on her 30,000 mile scientific cruise for the Field Museum of Chicago, Gargoyle Marine Oils were selected for the correct lubrication of her 300-h.p. Bessemer-Diesel engine.

Easy accessibility, as well as uniform quality, was an important consideration to the leaders of this expedition, which sailed far from the beaten track. And wherever she touched, the "Illyria" always found a ready supply of Gargoyle Marine Oils.

Cruising yachtsmen will find experienced Vacuum Oil Company representatives in more than 300 of the world's leading ports. They are thoroughly acquainted with every type of marine engine, and ready at all times to offer expert aid in solving any lubricating problem.

The practical engine room economies of Gargoyle Marine Oils make them the choice of experienced engineers the world over. Years of consistent use have proved that these high-quality lubricants conserve horsepower, save fuel, minimize repair charges and lengthen the life of propelling machinery.

New Diesel Booklet

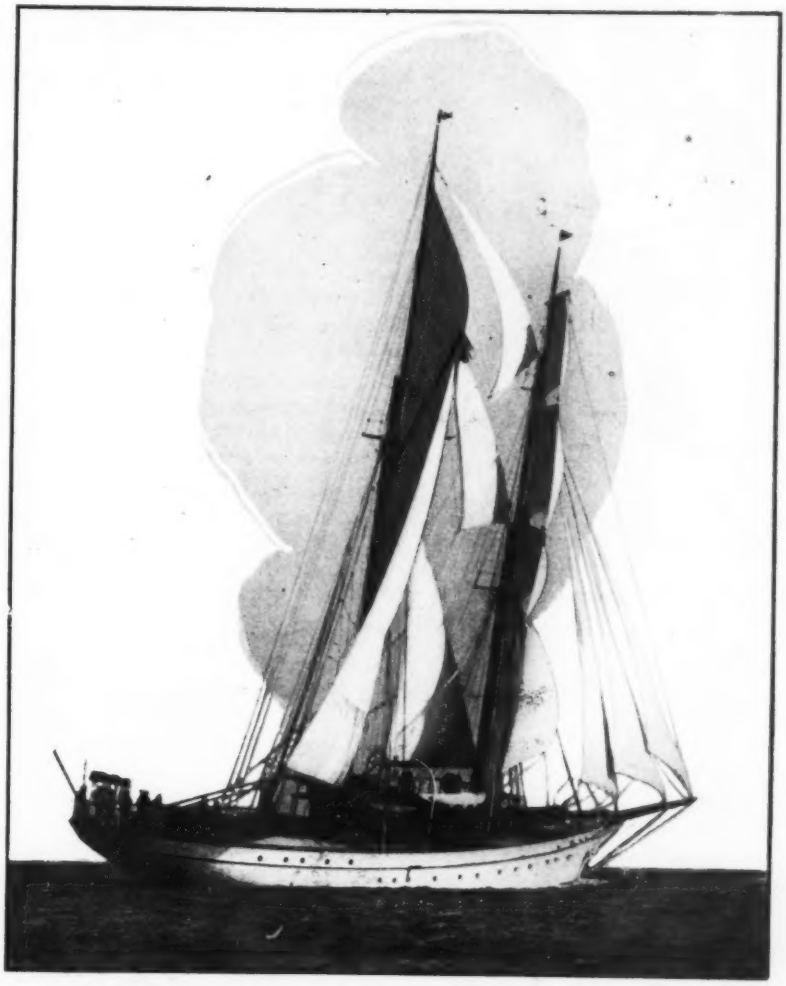
We have prepared an authoritative treatise covering lubrication requirements in every type of modern motorship. We will be glad to send you a copy free of charge. Address your request to Vacuum Oil Company, Marine Sales Dept. B-1, 61 Broadway, New York City.

VACUUM OIL COMPANY

New York City, U. S. A. • Specialists in the manufacture of high-grade lubricants for every class of machinery. Obtainable everywhere in the world.

GARGOYLE

Marine Oils



Cornelius Crane's motor yacht, "Illyria." One of the many well-known yachts lubricated with Gargoyle Marine Oils. (*Photograph courtesy "Motorship."*)

For Gasoline engines, the New Mobiloil

The New Mobiloil is the standard of lubricating quality for all boats powered with gasoline engines. Leading racing drivers rely on the New Mobiloil because it helps them *win* races.

A glance at the outboard records made with the New Mobiloil indicates the results obtained everywhere with this remarkable new oil.

10 out of the 11 records in class B
9 " " " 12 " " " C
6 " " " 8 " " " D

GARGOYLE

Mobiloil

"I'll be there in an hour"

IN air travel · · · · whether for business or pleasure · · · · distance is measured by hours and minutes, not by miles. Two points may be more than one hundred miles apart on the map, but separated by less than an hour of easy flight · · · · depending on the pilot's fancy for great or casual speed.

The business man or sportsman will find that a Spartan meets his every requirement for a private plane · · · · a means by which to avoid congestion of land travel · · · · and crowd more hours into a day.

A Spartan is distinctively trim and racy in appearance, excellent in finish, yet a hand-made plane of flawless material and sturdy qualities of construction. It is always dependable because it is amply powered for quick take-off, or high speed in flight · · · · and it lands as safely on the small, private field as on the airport.

Spartan airplanes have two inherent safety factors. 1—A Spartan will not spin accidentally · · · · it must be forced. 2—Its design insures natural, level, straight-away flight. And its smooth response to control has distinguished it as a plane extremely easy to fly.

A folder describing the Spartan C-3-165, powered by the Wright "Whirlwind Five," (U. S. Dept. of Commerce Approved Type Certificate No. 195) will be sent on request.

SPARTAN AIRCRAFT COMPANY • TULSA, OKLAHOMA

The big yachts are beginning to arrive at the Palm Beach docks

TWO REGATTAS FOR WEST PALM BEACH

RACING with a real vengeance, judging from all advance reports, will characterize the winter yachting program down around West Palm Beach this season.

Not only has that resort announced a trophy list to make the crown plate of England look well to its laurels, but it has also added a second flashy regatta to its time-honored annual Washington's Birthday event. As usual, the Eighth Annual Washington's Birthday classic will hold the boards on Lake Worth February 21 and 22. But new on the West Palm Beach card will be a big Lincoln's Birthday speed party for the outboards on February 12 and 13. This latter event will be conducted under the auspices of the Palm Beach Anglers and Sports Club.

Meantime, the big yachts have already taken their winter stand in the azure waters of Lake Worth and skippers are finding facilities both attractive and complete. The new dock of the Palm Beach Yacht Club, Inc., is ready for occupancy and the excellent new municipal pier, built last season, is rapidly filling with yachtsmen here for their winter's tan. Gasoline, water, laundry service and marine hardware supplies are all available at West Palm Beach and with the deepening of the channel from sea to lake to 18 feet even the biggest yachts are now steaming into the harbor.

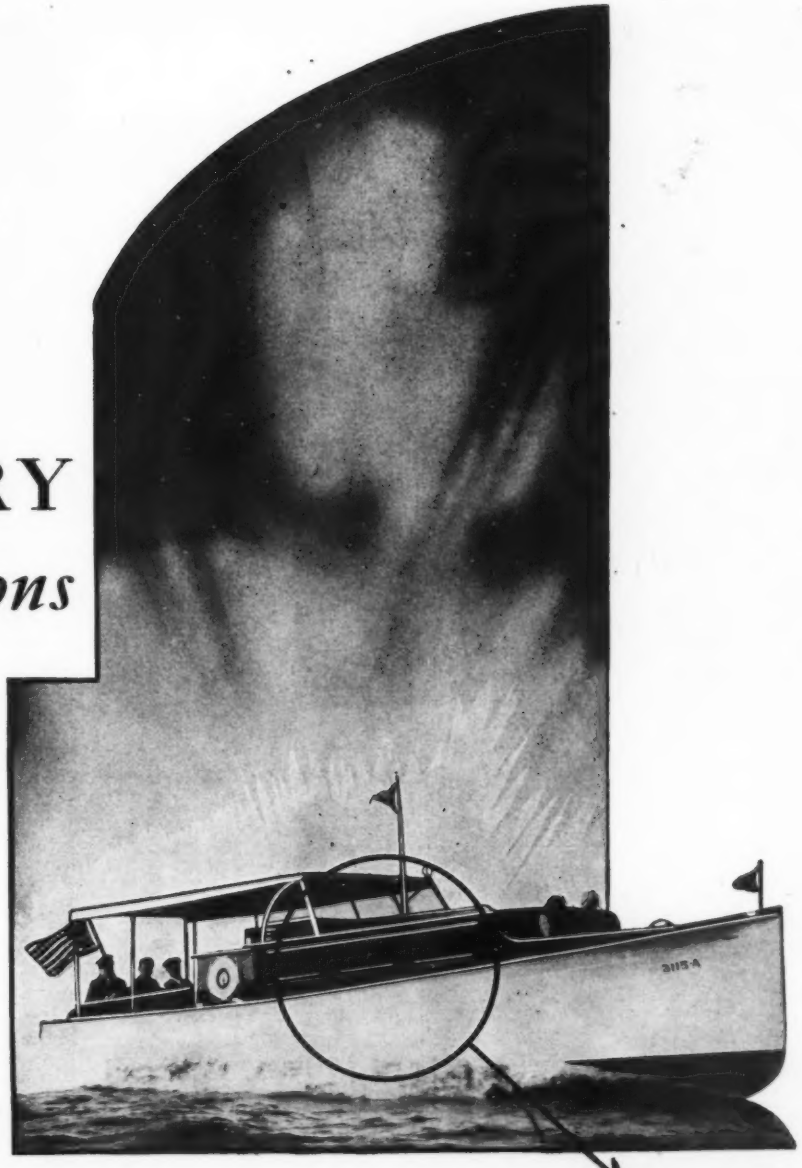
But back to the regattas—since every yachtsman is interested in the rivalry of the speed demons whether as an onlooker or a trophy-covetous participant. As in past, the Palm Beach

(*Continued on page* 156)

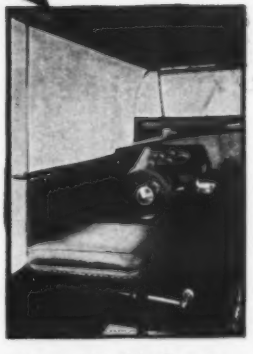
Advertising index will be found on 3rd last page

HUNGRY *for Horizons*

▾ ▾ There's a sea-going swagger about the new Corsair; an eagerness to go



HERE'S the craft for the vagabond . . . the one who likes to do his vagabonding in ease and luxury. Expert design and master craftsmanship have created in the Corsair 36-foot cruiser something decidedly new . . . something rather splendid . . . something that is a notable departure from orthodox boat building practice . . . something that is modern as tomorrow, yet breathes the age-old spirit that clipper ships took down to the sea. ▾ ▾ ▾ May we mail you photographs and a simple description of the production methods which enable us to deliver this unusual craft at a remarkably reasonable figure? Write for brochure number M-1.

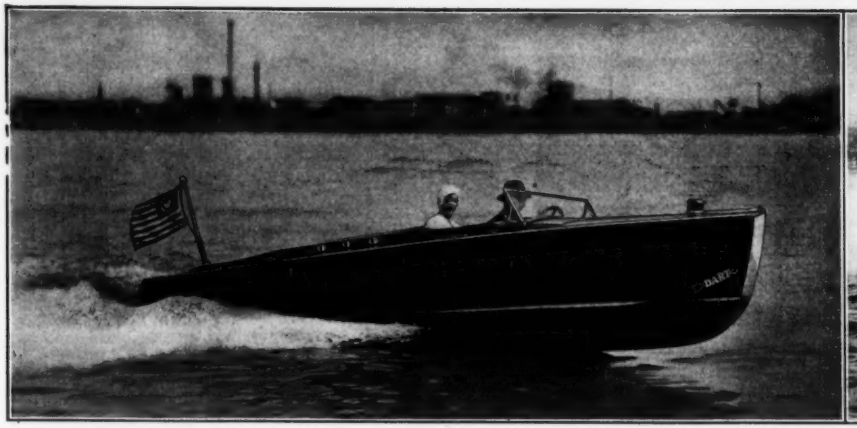


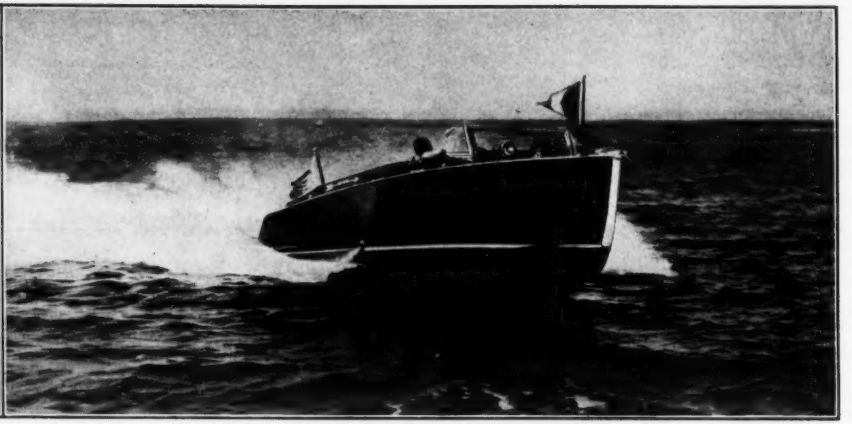
The controls of the Corsair are as easy to handle as those of a motor car. There is a folding seat for the skipper; a remote control wheel in the forward cockpit. A patented "Tattler" on the board automatically flashes the gasoline and oil supply

CORSAIR BOAT COMPANY

Offices: 1030 BUHL BUILDING, DETROIT, MICH.

Plant at Trenton, Michigan, on the Detroit River





HERE are the 1930 models of Dart Speed Boats—more dashing, more beautiful, more luxurious than ever before—but embodying the same principles of sturdy construction and careful workmanship that have made Dart the quality standard of the runabout industry.

As in the past, the new Darts offer more speed per horse power, smoother riding quality and additional seaworthiness at prices no higher than other runabouts of their same type.

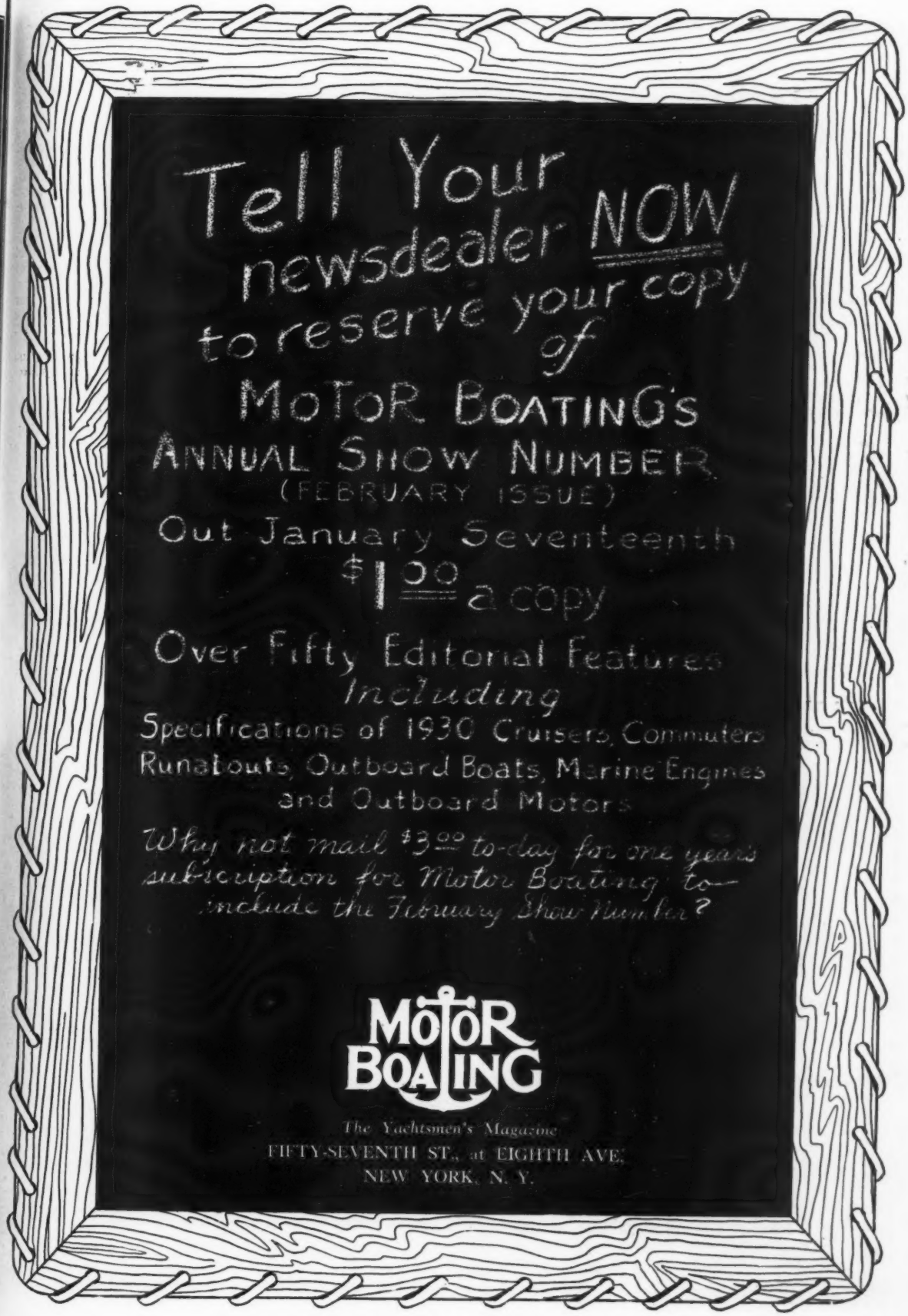
If you have the opportunity, see the new Darts at the Motor Boat Show; otherwise write us and we will tell you where these boats may be viewed and give you other information and specifications.

Four models 18½′ (upper left), 22½′ (upper right), 26′ (lower left) and 30′ (lower right.) Sedan type if desired in the larger models.

DART

DART BOATS · INCORPORATED
TOLEDO, OHIO

Advertising index will be found on 3rd last page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ANNUAL SHOW NUMBER
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Out January Seventeenth
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Over Fifty Editorial Features
Including
Specifications of 1930 Cruisers, Commuters
Runabouts, Outboard Boats, Marine Engines
and Outboard Motors
Why not mail $3.00 to-day for one years
subscription for Motor Boating to—
include the February Show Number?
MOTOR BOATING
The Yachtsmen's Magazine
FIFTY-SEVENTH ST., at EIGHTH AVE.
NEW YORK, N. Y.

"Half-Mile-Ray"

No. 880A Pilot House Control

A Good Boat Deserves It!

Famous for its dependability — its beauty — its penetration. Sturdy. Instantly controlled.

Standard equipment on Chris-Craft, Elco, Matthews, Richardson, Rochester, Banfield, Chance, Greenport, Jardine, Humphrey, Wheeler and other famous craft. Also "One-Mile-Ray" — same style but twice the range.

Quick, positive control through heavy bronze gears, 8-inch drum. Wiring enclosed in metallic cable — absolutely waterproof. Brass or Khaki enamel—$60.

Write for Folder describing Portable Light Searchlights for Every Marine Purpose— $18 to $125.

The PORTABLE LIGHT CO., Inc.
12 Warren Street New York

Also Exclusive Marine Distributors for Northeast "Whistletone" Horns and Sireno Sirens

If You Are Going to Use Your Boat in New England

Ask for the

NOYES-STEARNS REPRESENTATIVE AT THE FOLLOWING N. Y. MOTOR BOAT SHOW EXHIBITS:

Chris-Craft
A. C. F. Cruisers
Wheeler Shipyards

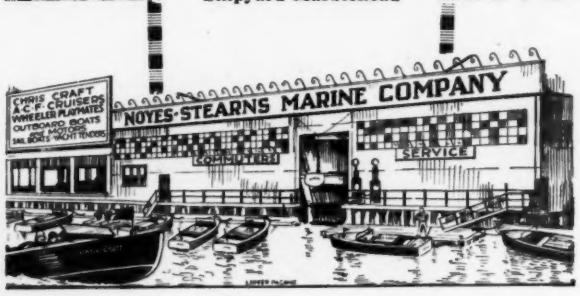
These representatives are thoroughly conversant with New England coast waters, lakes and rivers, and are in a position to give you the benefit of their valuable experience in informing you of water conditions wherever you plan to use your new boat next season.

Write us for advance information

NOYES-STEARNS MARINE CO.

305 Congress St. BOSTON *Tel. Hub. 4372*
338 Pearl St., Hartford

Shipyard-Marblehead



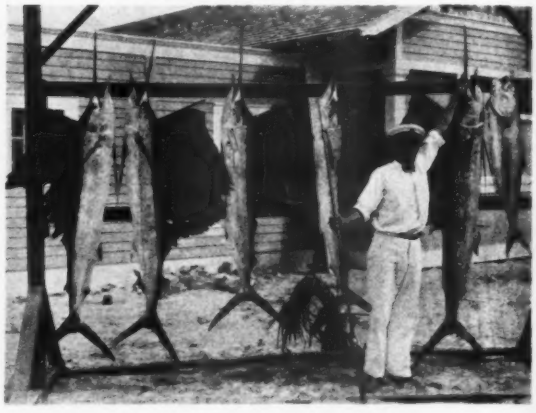
REGATTAS AT WEST PALM BEACH

(*Continued from page 152*)

Yacht Club will sponsor the Washington's Birthday classic but this year it will be under the direction of Vice Commodore W. J. vonBeheren, who is chairman of the regatta committee. As long ago as last September he began to sign up the boys —such stars as Chris Ripp and Ed Hammond, those seasoned hydro-plane veterans; Dick Lyons, who walked—or rather rode —off with the Royal Poinciana trophy last year; Capt. Henry Farnsworth, whose name last year was linked with a great Hacker-Dolphin win, and Elmer H. Johnston, who as a sportsman has no peer. These are just a few of the big ones who will pilot the craft roaring down Lake Worth in February.

There are already half a score of others who have signified their intention of going after the impressive aggregation of trophies lined up for the event.

For the battle this year there will be two new cups—a new Royal Poinciana trophy for limited hydros to replace the one now in Loynes's possession for all time—and the Col. E. R. Bradley gold cup for the unlimited 151's. This is not the first trophy the famous Kentuckian has contributed. The first cup was carried off by Mrs. W. J. Conners with her Miss Okee-



A typical day's catch of sailfish from the waters around West Palm Beach

chobee. So now he's given a second and this time for the hydroplanes. Then there is the Elgin National Time trophy and the Commodore Ringling trophy—to say nothing of a cash fund for the outboard field and most likely the usual $900 in cash for the hydroplane pilots. Commodore D. H. Conkling, beloved pilot of the Palm Beach Yacht Club for several years, is as active as ever in plans for the event and Commodore A. I. V. Wilson, guiding the club destinies at present, is promising the biggest classic in the resort's history.

The new Lincoln's birthday event for outboards will bring together hulls from all parts of the country. V. Mason Weil, who is at the helm of the anglers club event, has a list of trophies for the outboards to satisfy all of the champions. There is, for instance, a $20,000 cup from Great Britain, a $5,000 cup from Italy, a $5,000 cup from a South American country and some $3,500 in cash prizes, according to Mr. Weil. The three big cups must be won three times to become permanent possessions, but the cash prize—well, they can travel north with the winners, says Mr. Weil. Michigan is sending 28 hulls to carry its colors and Long Island is preparing a large field with which it is hoping to carry off honors, to say nothing of many craft from other states.

Fishing this year is also commanding an unusual interest among yachtsmen already at West Palm Beach. Dockmaster R. V. Watts attributes the interest to the new souvenir booklet, "Fishin' in the Sunshine," which the city has printed this year. This book, rather an unusual little trick, completely catalogues more than a score of the outstanding fish in tropical Florida waters and tells, how, where and when to catch them. It is being distributed to all arrivals at the docks.

On land, of course, so the announcements run, all manner of seasonal festivities, sports and recreations are under way, rounding out what might be called a perfect welcome.

Advertising index will be found on 3rd last page

The Oil that makes every craft a WINNER!

A winner from every viewpoint! Chosen by boat racers for greater speed . . . chosen by boat owners for greater economy . . . chosen by boat builders because it's kinder to the engine! For every size and type of craft, there's an EMPIRE Oil . . . made with infinite precision from 100% pure high gravity Pennsylvania crude oil . . . with higher flash and fire tests and easier starting qualities which mean *winning* performance from your boat!

Permit No. 98

PENNSYLVANIA PETROLEUM PRODUCTS Co., Inc.

PROVIDENCE . . . R. I.

MARBLEHEAD ANTI-FOULING GREEN BOTTOM PAINT

"We are pleased to recommend this preparation as representing the highest grade product that can be used."
—JOHN H. WELLS, Inc.

"We have used Marblehead Anti-Fouling Bottom Paint for nearly fifty-five years on practically all of our yachts and the fact that we continue to use and specify it wherever possible is proof that we are satisfied with the results obtained from this remarkable paint."
—HENRY J. GIELOW, Inc.

"We have been unable to find anything that will stand up as your paint does under all conditions."
—GEO. LAWLEY & SON CORP'N.

STEARNS-McKAY MFG. CO.
Marblehead, Mass., U. S. A.

Clean Your Boat . . . inside and out with this Sudsy Action Cleanser

The result of 33 years' experience in the manufacture of cleaning preparations, Silver Suds Marine Cleanser penetrates and dissolves dirt by an exclusive sudsy action.
Silver Suds Marine Cleanser is prepared exclusively for the economical and safe up-keep of the yacht and not a violent scouring compound for paint-removing purposes. It is an excellent hand soap—instantly removes engine room grease—and harmless to the skin.

USE SILVER SUDS FOR THE HULL.
1 and 5 gallon wooden pails at $2.00 & $7.50. Send 50c for trial pail

SILVER SUDS
Marine Cleanser

DEALERS AND DISTRIBUTORS WANTED — SILVER SUDS MFG. CO., Philadelphia, Pa.
TOPPING BROTHERS, *New York Distributors*, 159 Varick Street, New York

Of striking beauty and staunch construction these Artistic Steel Floats are designed for use as permanent moorings. They may be constructed in any size and anchored in any harbor.

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Telephone: Circle 4653
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206 East Hanover St., Trenton, N. J.
Telephone: Trenton 6257-8

YARD AND SHOP

(*Continued from page* 150)

DETROIT YACHT CLUB ELECTS OFFICERS

George Harrison Phelps was elected and installed as commodore of the Detroit Yacht Club at the annual election of officers and directors for the year 1929-1930 held Monday night, December 9.

Mr. Phelps, succeeding LeRoy J. Gilbert as commodore, was unopposed for the position, as were Charles W. Kotcher, for the post of vice-commodore, and Dr. George H. Voelkner, who is the new rear-commodore, the opposition candidates having withdrawn in favor of these three.

While it has become almost traditional for the high officers in the yacht club to follow a definite order of succession, the places on the board of directors are always hotly contested and a stout battle was waged for the seven memberships in this body. New candidates elected were: L. F. R. Bellows, Charles F. Kettering, and John H. Rooks. Four directors successfully ran for re-election. They are Comm. Otto F. Barthel, Comm. Alex I. McLeod, Comm. LeRoy J. Gilbert, and Robert Oakman.

Prominent among the new directors is Charles F. Kettering, well known inventor and manufacturer, whose genius has won world wide acclaim. He is vice-president and director of the General Motors Corporation and general director of General Motors Research laboratories.

George Harrison Phelps, the new commodore, is perhaps best known as an advertising authority and author of books on business and economics. He is vice-commodore of the Yachtsmen's Association of America and of the Detroit Gold Cup Committee. In 1928 he went to Europe to arrange for the Harmsworth Trophy races, and during the past summer he provided and supervised the national broadcast over 40 radio stations of the Harmsworth competition.

Charles W. Kotcher, who becomes vice commodore, has been for many years an outstanding figure in American yachting. In 1909 he was president of the National Power Boat Association, consisting of 211 yacht clubs in this country. He has also served as commodore of the old Detroit Motor Club, the Inter-lake Yachting Association, and is now commodore of the Old Club of St. Clair Flats.

One of the most enthusiastic sailors in the club is the new rear commodore, Dr. Voelkner. And he is always called on to preside in emergencies, be they accidents or entertainments. Dr. Voelkner spends a goodly share of his summer days and nights on his boat, parked at the club dock or roaming through adjacent waters.

The annual election saw 395 ballots cast at the Book-Cadillac Hotel and at polling booths in the club itself. After reading of reports at the annual meeting, the results of the balloting were announced, and LeRoy J. Gilbert, retiring commodore, handed over the gavel of the office to Commodore Phelps, who spoke. A buffet luncheon followed.

The chairman of the election inspectors committee was W. D. Edenburn, secretary of the American Power Boat Association and chairman of its contest board, and chairman of the regatta committee for the Detroit Gold Cup races. Assisting him were James E. Sullivan, as vice-chairman, and Owen S. Bacon, H. J. Brachman, Frank J. Hall, L. G. Gillette, Frank M. Hearn, Marvin Moesta, and Leo J. Monahan as inspectors. Frank J. Hall was chief clerk.

SANDS POINT SHIPYARD SOLD

The Sands Point Shipyards, Inc., Port Washington, Long Island, has been purchased by Joseph Leopold, president of the Consolidated Instrument Company of America.

A controlling interest in the company was recently secured by Mr. Leopold who plans to immediately rebuild the entire yard. New buildings will be constructed for offices, show rooms and shop, the equipment for the latter to be complete in every detail.

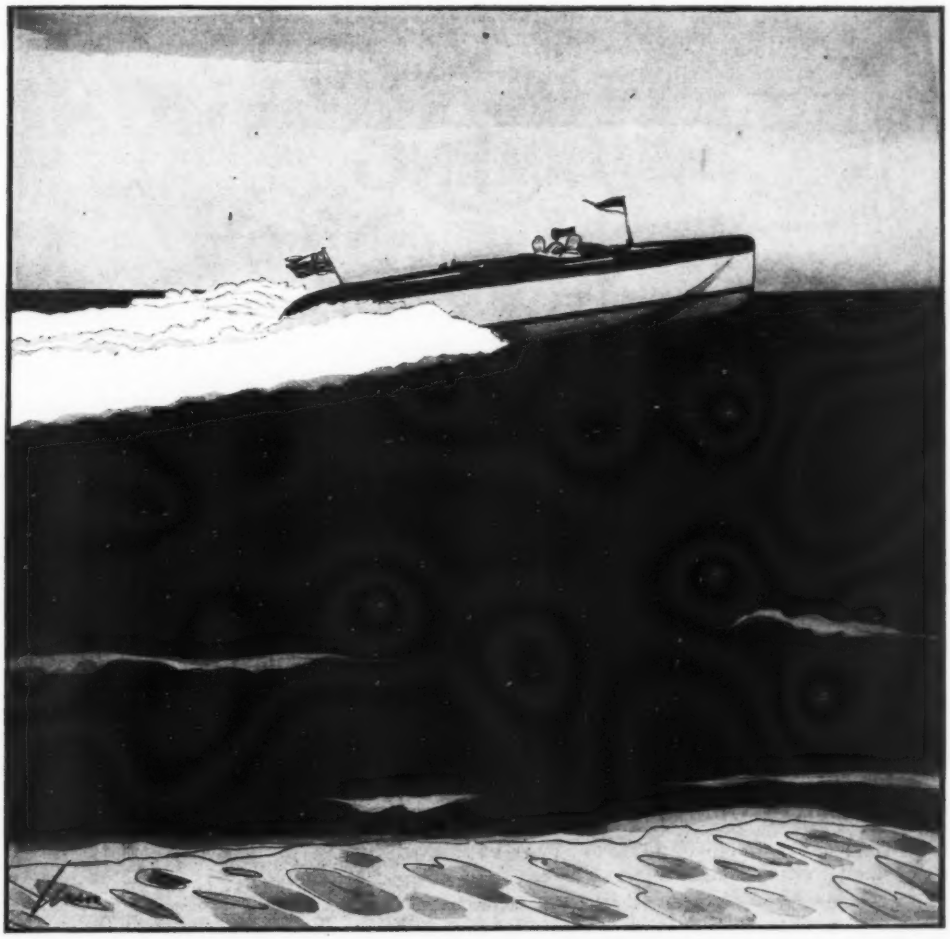
In addition, the present docking facilities will be enlarged and extended to the existing channel, with crane equipment provided to make possible the hoisting of boats for repair at all tides. New marine railways will also be included.

It is planned to take on the distribution of a number of leading makes of boats and engines for the Manhassett Bay territory; and a complete stock of accessories, as well as replacements, will be carried for the convenience of boating and yachting enthusiasts.

A new accounting and cost system has been installed and when alterations are completed the Sands Point Shipyard will be capable of servicing every kind of pleasure craft.

Advertising index will be found on 3rd last page

NO SPEED LAWS ON THE WATER HIGHWAYS



LIVING in the country, working in the town, this man has no acquaintance with traffic tangles nor with grimy trains. On the water highways he moves quietly, speedily, pleasurably. His swift commuter turns a forty-mile trip into an hour's holiday instead of two hours of harassment!

It is true that few men can possess a servant such as this. But the man who does, can live the double life of a calm and peaceful countryman and an active man of town, in effortless ease. He can plan and organize as he skims to work. He has those moments of repose, so valuable and important, in which to "gather himself" and recruit his forces for the day.

And in his lighter hours, his speed-boat is an urge to sport . . . a thrill . . . or a carefree diversion . . . He may drift lazily off white beaches in the sunshine. He may taste the spray that comes from the breeze at forty, at fifty miles an hour. For speed, stark and sudden, is his to command—an exuberant rush through water, that seems faster than light!

And his craft will never fail him, for it is powered with a Wright Typhoon.

WRIGHT TYPHOON

Address inquiries to Marine Engine Division

WRIGHT AERONAUTICAL CORPORATION

Paterson, New Jersey

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Published by

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COLUMBIAN
BRONZE PROPELLERS

STYLE "I"

This style "I" propeller is well adapted for the majority of boats and is the most popular type in use today.

Cap'n Allswell says:

"Increased speed is a 'knot-ty' problem which a Columbian can unravel for you."

The demand for Columbian Bronze Propellers comes from every conceivable branch of marine building. And all along the line from "Put-puts" to large Ocean Liners they turn in records for increased speed.

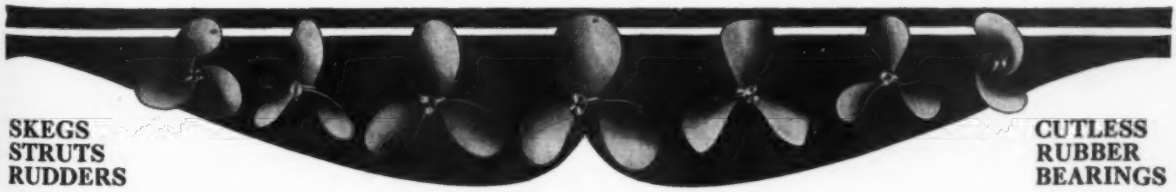
The services of Columbian engineers are always available for advice on propeller problems, assuring correct pitch and perfected design as applied to your particular boat.

For better performance and efficiency equip with Columbian Bronze Propellers.

Exhibiting; New York Motor Boat Show, Booths 105 and 106, Third Floor

COLUMBIAN BRONZE CORP.

208 North Main St. Freeport, L. I., N. Y.



SKEGS
STRUTS
RUDDERS

CUTLESS
RUBBER
BEARINGS

YARD AND SHOP

(*Continued from page* 158)

ECONOMY IN REDUCTION GEARS

Further evidence of the efficiency and satisfaction delivered by medium duty engines in driving heavy cruisers through reduction gears is found in a letter from George Gaw, owner of the 62-foot cruiser P D Q Envelope, to the Buda Company.

P. D. Q's power plant is a Buda G M F R-6, and in his letter, Mr. Gaw says: "Almost immediately upon installation, I started on a cruise of some 1500 miles in the waters of the Great Lakes and Georgian Bay. Our boat draws six feet of water. We cruised at eleven miles per hour at 1150 r.p.m. and averaged 1.4 miles per gallon of gasoline. Our oil consumption was frightfully low—we changed oil twice. In both cases the oil was practically as good as new. It being a new engine we felt it advisable to change the oil. We have since learned that several other boats with your installation experienced the same conditions. We thought something was wrong —we had not been accustomed to burning such a small amount of oil."

P D Q Envelope, a heavy 63-footer powered with a Buda G M F R-6. Her owner, George Gaw, is enthusiastic about the efficiency and economy of the reduction gear installation

SACKRIDER BACK

After a protracted illness of more than a year, friends of J. W. Sackrider will be glad to learn that he has fully regained his health and that he is now ready to resume his former connection with George B. Carpenter & Co. of Chicago, as head of their marine department. Mr. Sackrider, popularly known as Sack, has been identified with the Mississippi Valley Power Boat Association, in which he has done excellent work as an officer and organizer. Twice he has served as president of that organization.

INSURANCE BROKER MOVES

Edwin H. Tucker, general insurance broker, formerly located at 81 Fulton Street, New York City, announces the removal of his office to Room 22, 135 William Street. Mr. Tucker's service includes insurance of every kind anywhere in the world.

VAN BLERCK MOTORS REORGANIZED

Nick Rost, Vice President in charge of Sales, Van Blerck Motors, Red Bank, N. J., announces that Frear & Company of New York City, and E. B. Merritt & Company of Bridgeport and Boston, investment banking houses, who have been very active in the past year in the Aviation Field, have underwritten the new stock issue of Van Blerck Motors Incorporated. The company was formerly capitalized at four thousand shares of no par value common stock closely held. The new company is now capitalized at fifty thousand no par value common stock. An addition to the plant has already been built, equipment is being installed and it is planned to produce five thousand Van Blerck Junior motors in the next twelve months.

The new Board of Directors and officers are as follows: Joseph Van Blerck, Chairman of the Board; M. H. Simmons, president (Mr. Simmons is also vice president of the Dayton Aeroplane Engine Co.); R. E. Squires, vice president; Nicholas G. Rost, vice president in charge of sales; and H. N. Hukell, treasurer.

These officers, with P. A. Frear and E. B. Merritt, constitute the Board of Directors.

LAYING DECK CANVAS

When laying a canvas on a deck with Marine Glue, there are two grades of the glue that may be used. One is Jeffery's Liquid Marine Glue C Quality, which is ready to apply with a brush. The other is Jeffery's No. 7 Marine Glue which must be melted before it can be spread. Either grade will give excellent results.

To melt the No. 7 heat should be applied directly to the can. (It is not sufficient to set the can in hot water). When properly melted the temperature is about 285 degrees Fahr, and is then ready to spread with a stiff brush over the entire surface. Then stretch the canvas tightly into place and fasten with copper tacks. Next go over the canvas with a warm flat iron. This sweats the marine glue into the canvas and attaches it firmly to the deck. Do not use the iron too warm. If it is hot it will scorch the canvas and injure the glue. Apply a coat of shellac before painting.

Where the C Quality Liquid Marine Glue is used, paint the glue over the entire surface to be covered, using a stiff brush. Stretch the canvas in place as soon as possible and tack it down before the liquid Marine Glue has time to set. Make sure of contact between the canvas and the deck by pressing or rolling it. It is not necessary to use a flat iron on the canvas when it is set in the Liquid Marine Glue. Allow the glue to dry, then give the whole surface a coat of shellac before painting.

(Tanare)

Henry Clay Foster presenting the Hunt trophy to Commodore Vonau at the Sheepshead Bay Yacht Club while L. W. Cloak and G. Graef look on

BOSCH ENLARGES PLANT

Increases in sales of both precision automotive electrical radio products and products of the American Bosch Magneto Corporation of Springfield, Mass., over previous years, have made necessary the erection of a substantial addition to the present plant A on North Main Street.

Fred T. Ley Company, of Springfield, has been awarded the contract. The concrete foundation has been laid, and steel work, furnished by the Palmer Steel Company, also of Springfield, is fast shaping the new structure.

The new building is partly of saw-tooth type and partly of regular two-story construction and when completed will house the most modern of heat-treating and hardening rooms, a new sand-blasting room, a department for scrap reclaiming, store rooms for maintenance supplies, and sundry production supplies, a store room for packing and shipping materials, as well as one of the most complete and modern shipping departments in the city.

The Dodge Boat Works Use Lycoming 8-In-Line Marine Engines as Standard in Their 26-Foot Runabout

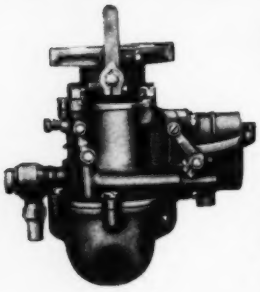
Nothing *Finer* Can Be Said of Any Motor Boat Than, It is -

LYCOMING MOTORS

LYCOMING MANUFACTURING CO.
WILLIAMSPORT, PENNSYLVANIA

Lycoming Marine Engines are also Available to the Retail Trade

ZENITH



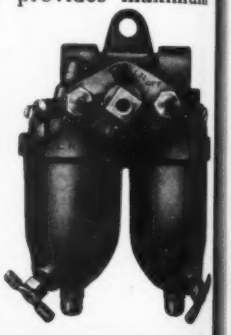
NOW *is the TIME to Equip with Zenith Carburetors and Filters*

If your boat is lying idle this winter, or if you are preparing to go south, it is a good opportunity to install Zenith **marine** carburetion — and give your engine better protection with the wonderful new Zenith filter.

The Zenith Marine Carburetor has demonstrated the value of the time-tested Zenith principle of carburetion as applied to marine requirements. Its positive, dependable action—no moving parts affecting the mixture—gives satisfaction. Rough seas or quick turns have no effect on engine performance.

Zenith **high-efficiency** Filters are built in various models for every make and size of gasoline or oil engine. They remove all impurities at sustained speeds and in the hardest service. Efficient in action, easy to install and clean, Zenith filters are sturdy and durable, with **no fragile parts.**

A Duplex Zenith Filter provides maximum safety if you frequent rough off-shore water, strong current or tides. It is cleaned without stopping the engine. Send for catalog and dealer's name.



ZENITH-DETROIT CORPORATION

Manufacturers of Zenith Carburetors and Filters

DETROIT **MICHIGAN**

BRANCHES:

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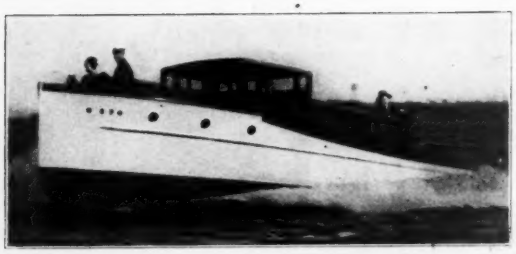
ZENITH



Llenroc II, a Toppan built 31-foot Standardized Express Cruiser, has been very successful in many races of importance throughout New England. It was designed by H. M. Lewis.

TOPPAN Boat & Engine Company have equipped this exceptional craft with Tiebout hardware because they know these fittings are dependable.

We have been serving a major portion of eastern builders for many years in like capacity, and it is our earnest desire to eventually serve all.

May we send you a copy of our 1930 catalogue?

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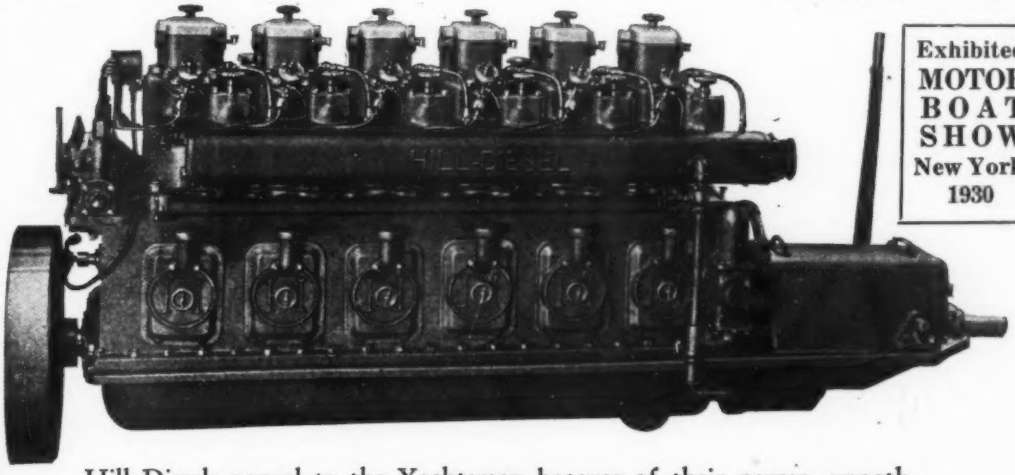
The Fuel Is Burned Clean — No Smoke or Fumes



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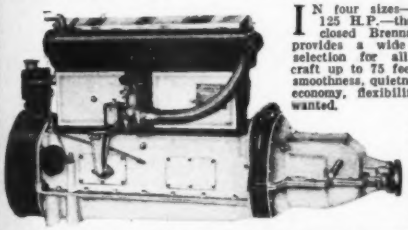
This is the Diesel you have been waiting for—Described in Bulletin 60

Hill-Diesel Engine Company

248 MILL STREET
LANSING, MICHIGAN, U. S. A.

for Cruisers, Runabouts and Commuters

BRENNAN DELUXE SIX



IN four sizes—60, 90, 100 and 125 H.P.—the compact, all-enclosed Brennan De Luxe Six provides a wide range of power selection for all types of motor craft up to 75 feet in length where smoothness, quietness, dependability, economy, flexibility and speed are wanted.

Write today for BRENNAN catalogue. Eleven models—15 H.P. to 200 H.P.

Boat Builders and Engine Dealers: Write for our proposition.

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500 E. WATER STREET — SYRACUSE, NEW YORK

PERKO PRODUCTS

See what is NEW in

Marine Lights

and Equipment Specialties

at the "Perko" Exhibit, New York Motor Boat Show, Booths 40-40a—3d floor

Note the "Perko" Equipped boats throughout the Show—the name is a guarantee of up-to-date design and superior quality.

Every boat owner should have our new catalog—**sent free.**

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Clubs, yacht owners, commercial boat owners should take advantage of our almost 70 years' experience in outfitting the mariner, both inland and deep sea.

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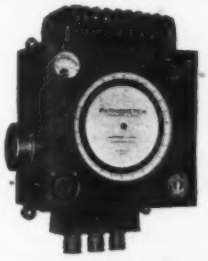

are made with the

Fathometer

Measurements of Water Depth beneath the Keel

—are—

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FATHOMETER SOUNDINGS INSURE SAFE NAVIGATION

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The Reference Book Which Combines the Important Data to Be Found in All Government Publications of Interest to Motor Boatmen and Yachtsmen Into One Volume

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*Sixty complete motor boatmen's charts covering the entire Atlantic Coast, Great Lakes, important harbors and rivers
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*List of important lights on Atlantic Coast, their characteristics, fog signals, etc.
*Current tables showing time of slack water, strength of current, time of current changes, etc., at all important points
*Latitude and longitude tables, giving the locations of over 1,000 points, aids to navigation, etc.
*List of ports where numbers of motor boats are assigned
*New York—Florida, motor boat inside route
A complete description of the course for motor boats to follow, where to get supplies, anchor, etc.
*Where to Cruise—
A chapter giving numerous suggestions and hints on cruising, description of the best cruising waters in the East and on the Great Lakes
*Yachting signal code
*List of all yacht clubs
*List of marine engines manufactured
*Trent Canal
*Notes about Government Coast and Geodetic Charts
*Where to buy Government charts
*Cruising to Florida in twenty days
*Racing Summary
*How to form a yacht club
*Duties of yacht club officers and members
Tables of times of high and low tides
*Tables showing time of sunrise and sunset
*Details of motor boat routes, New York to Albany, Albany to Buffalo, Albany to Thousand Islands, Albany to the St. Lawrence River and Montreal, New York to Philadelphia, Buffalo to Detroit, Miami, Fla., to New Orleans, etc., etc.
*Motor Boatmen's Charts of Lake Ontario, Lake Erie, Lake Huron, Lake Michigan, etc.
*Numbering Law—How to obtain numbers for your boat
Index to principal harbors which are described
Tide commutation table
Anchorage rules—Port of Boston
Port of New York—Anchorage rules
Rates of Pilotage—New York
Distances—Boston to New York
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Distance and Bearings—New York to Maine
Complete sailing directions (79 pages), entire Atlantic Coast, Maine to Gulf of Mexico. Detailed information on coastwise navigation, as well as complete instructions for getting into all harbors, bays, sounds, rivers, etc. Compass directions, distances, descriptions and locations of shoals, rocks and other dangers to navigation. The waters described in detail include Atlantic Coast, Coast of Maine and all harbors and rivers. New Hampshire, Portsmouth Harbor, Massachusetts and all of its principal harbors; Massachusetts Bay, North, South and West shores Cape Cod Canal, Cape Cod to New York, Buzzards and Narragansett Bays and Long Island Sound, including motor boat and yacht harbors, anchorages and tributary rivers. East River to New York City, South Shore of Long Island, New York Bay and Harbor, Coast of New Jersey, Hudson River, Chesapeake Bay, Delaware River and Bay, Hampton Roads and all tributary waters, Potomac River, Inside Route—New York to Florida.
Water Routes, New York to Chicago and Duluth, including New York State Canals, sailing directions on the Great Lakes
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The compass and buoys
Useful information on motor boats
Help in case of accidents
Definition of astronomical terms
Buoyage system
What to do in a storm, use of oil
To prevent collisions
Boat service, keeping a log
Barometer, weather signs, signal stations, etc.
Life-saving signals, information about sails, etc.
Speed and knot table
Compass points and degrees
Various tables useful to motor boatmen
A. P. B. A. Allowance tables
Hints on motor boat handling
Ignition and battery information
Locating and what to do in case of engine trouble
Hints on installation and operation of motors
Government regulations and equipment required to be carried on board motor boats
Yacht Routine
Flags and how flown
The International Code of Signals
Sailing directions and entire set of courses from Nova Scotia to Florida (51 pages)
Marks and symbols used in charts
Rules of the Road at Sea
Laws relating to yachts and motor boats
Districts of the U. S. Steamship Inspection Service
*To Find Time of Slack Water at any point
*Buoys; what they mean and how to use them
*Tidal Current of Light Vessels
*List of ports where numbers for motor boats are assigned
*Notes about government coast and geodetic charts
*New York State canals and navigation regulations
*Sailing directions on the Great Lakes
*Signals for the Opening of draw-bridges on Great Lakes
*Yacht Club Constitutions and By-Laws
*Distances on the Mississippi River
*Important Motor Boat Courses
*Primary and secondary sea coast lights, their characteristics, fog signals, etc.
*Duties of regatta committees
*Navigational aids and the use of charts
*Distances between points on Great Lakes
*The Yachtsman's log sheets
*The America Cup races

*Indicates new feature.

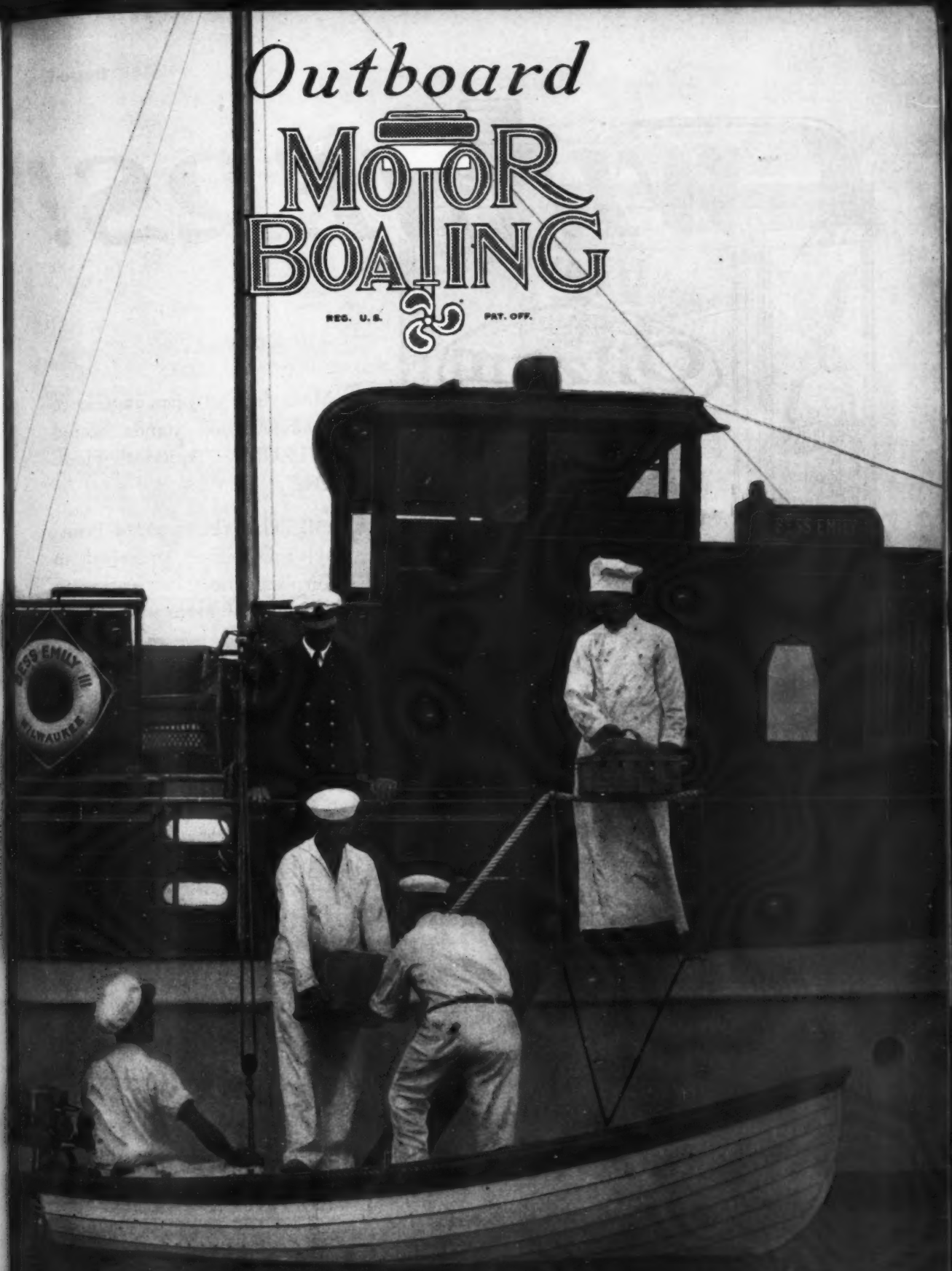
The Yachtsman's Guide will be sent postpaid upon receipt of price $1.50
The Yachtsman's Guide Flag Supplement, $1.00, Both for $2.00

MoToR BoatinG, FIFTY SEVENTH ST. AT EIGHTH AVE., NEW YORK, N. Y.

Advertising index will be found on 3rd last page

Outboard MOTOR BOATING

REG. U. S. PAT. OFF.



WINNERS!

More than 40 years experience in lubrication stands behind OILZUM—"America's Finest Oil."

OILZUM, the cream of Pennsylvania oils is processed to furnish proper lubrication to all types of motors.

The long list of OILZUM winners during the 1929 racing season attests the value of this ideal lubricant.

As a matter of proper lubrication the best is the least expensive.

MANUFACTURED BY THE WHITE & BAGLEY COMPANY, WORCESTER, MASS.

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Outboard MOTOR BOATING

FIFTY-SEVENTH ST. AT EIGHTH AVE.,
NEW YORK, N. Y.

Edited by
CHARLES F. CHAPMAN

JANUARY, 1930

CONTENTS

AUBURNDALE HOLDS THANKSGIVING RACE.. 171-172
BUILD A STARTING CLOCK..... 173-174
FLORIDA'S INLAND WATERWAYS GROWING.... 175-176
PERFECT CONTROL FOR OUTBOARDS..... 178
ANY BOY CAN DO IT..... 180
CALIFORNIA'S MID WINTER REGATTA..... 184
THE MONTH WITH THE OUTBOARD..... 186-190

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MIDDLE ATLANTIC ASSOCIATION ELECTS OFFICERS

The third annual meeting of the Middle Atlantic Outboard Association was held on November 14 at the Columbia Yacht Club on the Hudson River at 86th Street. At this meeting William M. Eldridge was elected as the new commodore and A. Avery Hallock was chosen vice-commodore. Paul Revere Smith was elected rear commodore. Other officers are: W. E. Willis, secretary, Ira Hand, treasurer, and Bruno Beckhard, measurer. At the meeting plans for the ensuing year were outlined and discussed.

MILWAUKEE EXPECTS RECORD YEAR

Milwaukee, the leading city in the manufacture of many different kinds of articles, will undoubtedly add another first place to its long list in 1930. This has been made possible through the formation early this year of Outboard Motors Corporation which is a merger of Evinrude Motor Company and Elto Outboard Motor Company of Milwaukee, Wisconsin, and Lockwood Motor Company of Jackson, Michigan. These three Divisions are now operating in the new factory and office at 27th and Capital Drive, where the Evinrude Motor Company has been located for about fifteen years.

J. Stern, vice-president of Outboard Motors Corporation, when asked for a statement, spoke as follows: "The outlook for substantial increase in business has seldom been brighter. With the constant increase in automobile traffic and the resulting jams and delays, people seeking recreation are practically being forced from the highways on to the waterways, and once they are introduced to outboard boating, the pleasures of the sport leave a lasting appeal.

"We have never before been so satisfactorily equipped for the production of outboard motors as now that our new factory and office are completed. Most of our 1930 models of Evinrude, Elto and Lockwood motors are now ready for production, and next year I expect that Milwaukee will lead the entire world in the production of outboard boat motors."

Each of the three Divisions has a nation-wide distributor and dealer organization which includes thousands. In addition each of the Divisions has developed a very large export business. According to W. C. Clausen, Director of Foreign Sales, there are sales distributors and dealers for these Milwaukee-made outboard motors in every nation of the world.

At present, business in the southern hemisphere, where summer is now rapidly approaching, has been very brisk. Improvements of the motors and the established records of past performance have strongly intrenched these Milwaukee-made products. A large number of motors in the southern hemisphere are being used for commercial, as well as for pleasure purposes.

OUTBOARD AHOY!

THIS new speed indicator tells you at a glance your speed.

It shows your speed under all conditions of load, trim, carburetor and spark adjustment, etc. And it helps *keep* your boat up to its greatest efficiency.

You can install it in a few minutes, instantly remove it and reinstall it as quickly. Trouble-proof, dependable. Once you use it, you will never go without it.

National Marine Speed Indicators

Outboard Models $15.00 each — **R up to 40 M.P.H.** / **S up to 60 M.P.H.**

Send today for booklet to The National Lock Washer Co., 40 Hermon St., Newark, New Jersey

MoToR BoatinG 1-30

THE NATIONAL LOCK WASHER CO.,
40 Hermon St., Newark, N. J.

Please send me booklet describing the outboard model of your National Marine Speed Indicator.

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NAME

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ADDRESS

Horsepower Size—Vestpocket Weight

An Outboard motor that pulls like a horse, that can be taken off, carried easily on a long portage—that's the kind of a motor the sportsman wants—"a mite made mighty."

Alcoa Aluminum Alloys, weighing only ⅓ as much as iron or steel, have made the shell and casting of the Outboard motor possible. And Lynite Pistons and Connecting Rods, made from Alcoa Aluminum, bringing not only light weight, but the ability to carry heat away from the cylinders 5 times faster than iron or steel, have spelt a propelling power of many horses in vestpocket size.

In this phase of transportation, as in all others, weight reduction is the greatest problem—light, strong Alloys of Alcoa Aluminum are the solution.

ALUMINUM COMPANY *of* AMERICA
2487 Oliver Building, PITTSBURGH, PA.
Offices in 19 Principal American Cities

ALCOA ALUMINUM

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JANUARY Outboard MOTOR BOATING 1930

Sally Cox won the girls' Outboard Race at Auburndale but let her mechanic, Red Lester, hold the prize, a 32-pound gobbler

AUBURNDALE HOLDS THANKSGIVING RACE

National Holiday Starts First of a Series of Outboard Races On Popular Florida Regatta Circuit

THANKSGIVING DAY ushered in the outboard racing season for the winter with a marvelous regatta at Lake Ariana, Auburndale, Florida. Many thousand spectators assembled along the banks of the lake on Thanksgiving Day afternoon and witnessed a thrilling contest in the Ladies Runabout Race. Miss Sally Cox of Winterhaven was successful in driving her Mullins Runabout, Roadster Girl, to a first place victory while close behind her in second place was Genevieve Atwood, also in a Mullins Runabout. These two girls were the leaders of the field throughout the contest and fought for the leadership at the turns. This event in the regatta of the Ariana Yacht Club brought out eight entries and they approached the starting line in perfect formation when the event was called. The fun started with the race, since it turned out to be one of the most exciting ever witnessed in the outboard history of Florida. It definitely determined the value of the outboard runabout as a feature in outboard racing events.

The candidates for the Ladies Race required that the boat be steered and handled entirely by the lady

As if aquaplaning were not sporty enough, Dick Pope now puts wings on his surfboard and Harrison Fraser tows him behind his racing boat in long hops at high speed

Jack Kerr driving the new Mullins Torpedo to victory at the Florida Thanksgiving Day Regatta

drivers, although it was also required that a man ride in the boats as a mechanic. Many of Florida's best known men drivers were glad to offer their assistance in this event as mechanics for the ladies. The fastest four cylinder outboard engines were used and the speeds attained ranged from 30 to 34 miles per hour. Acting as one of the judges at the first turning buoy, Dick Pope remarked that he had never before seen a field of drivers dive through a turn the way the girls did. Some of the skilled drivers riding as mechanics also commented that for several minutes in the course of the race they felt rather helpless as the boats were not under their control with the girls handling the throttle and steering wheels.

Miss Sally Cox with Red Lester of Orlando as a mechanic was the winner of the event. Miss Atwood carried Jack Kerr as her assistant. The other entrants with their mechanics in the order in which they finished were as follows: Miss Anna Katherine Cox and Harrison Fraser; Catherine Ellis and Walter Meloon; Eva Keefe and Cal Meloon; Lillian Criswell and Col. Tooey; Mary Pearl Moore and Malcolm Pope; and Mrs. Pursley and Carl Ellis.

The committee had selected a novel series of prizes for all events of the day. These consisted of a large turkey awarded to the winner, a duck for the second place winner, and a chicken for the third place winners. These prizes added much to the merriment of the occasion and were in keeping with the spirit of the holiday.

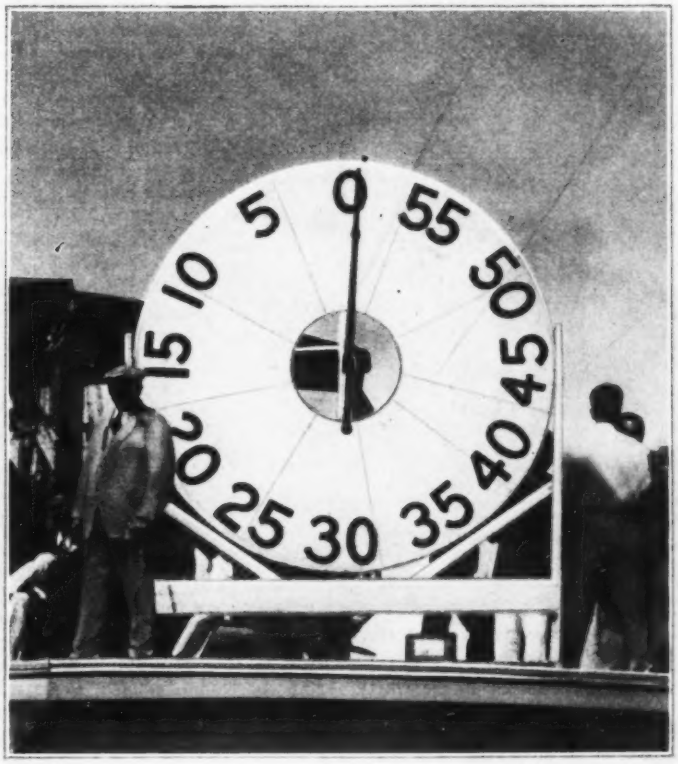
A well known remark of Julius Herbst in which he characterizes most of the Florida boys as being, "Gritz and Gravy" drivers seemed rather appropriate as it is reported some of them almost jumped overboard when Sally Cox promised to roast her thirty-two pound prize on the following Sunday and serve it to the entire group of drivers and mechanics.

The racing in the classes for the men drivers was also very keen. These men had been competing on frequent previous occasions and knew pretty well the ability of one another. The race in an unlimited class was won by Jack Kerr driving Torpedo, his Mullins hydroplane. He was closely followed by Harrison Fraser with a boat called Sea Horse 9, while Malcolm Pope driving his Mystery Kid was third.

Another event called the Turkey Day Sweepstakes brought the only victory of the day to Auburndale, when H. M. Fraser succeeded in coming in first. Cal Meloon driving Hava Tampa was second and Col. Tooey, driving Miss Cello was third. This boat was formerly Miss Mystery.

The Class D race was run in two separate heats which were both won by Mystery Kid, a Faybow boat in the hands of Malcolm Pope. Jack Kerr, in his Mullins Torpedo, was second and Harrison Fraser, in his Boyd Martin Bullet, Sea Horse, was third.

Col. Tooey of Boston driving Miss Cello was one of the top liners at the Auburndale Regatta



The starting clock as the contestants see it. Figures are large and the divisions by fives

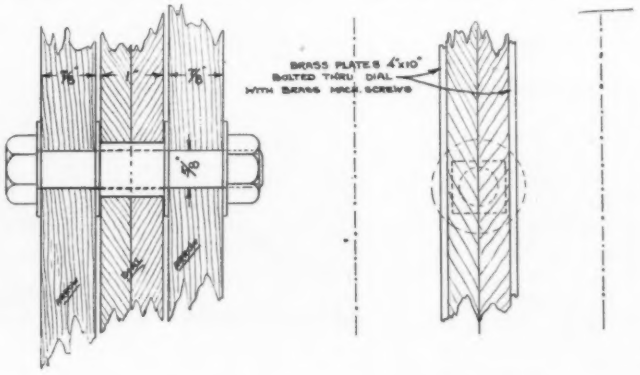
BUILD A STARTING CLOCK

A Most Essential Item in Race Committee Equipment Which Can Be Prepared in Time for Next Summer's Races

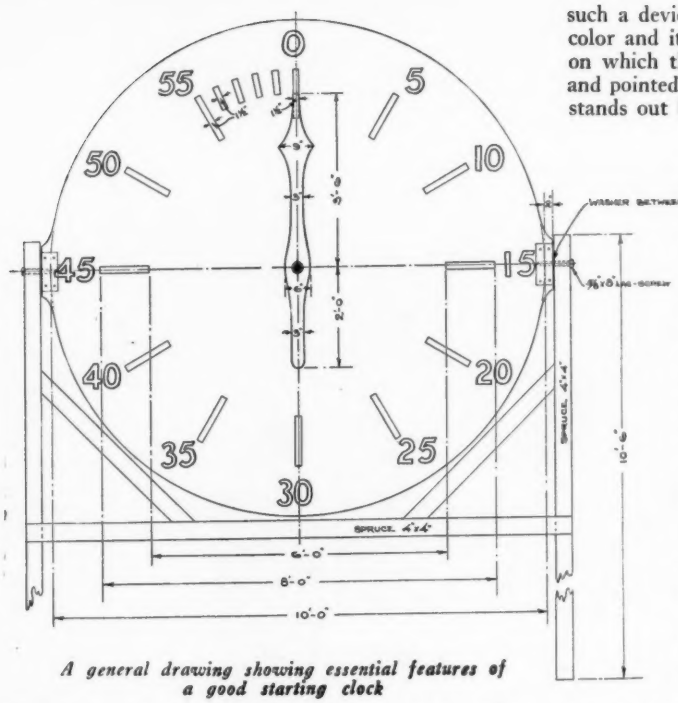
By F. W. HORENBURGER

THE amazing growth of the sport of outboard racing, and the consequent need for methods of handling the competition and work necessary to correctly time and score the contestants as they flash across the finish line has focused attention on better methods for starting events of this character. Practically every follower of racing has seen the so-called starting clock in service at some regatta. The success which attends the use of a device of this kind will more than compensate a race committee for the cost and effort necessary to produce one for their own use. It can almost be said that some form of starting clock is an essential part of a boat racing clubs equipment.

For the benefit of those who may not be familiar with a starting clock and its use, it might be desirable to explain the device. Basically it consists of nothing more nor less than a large section of board fence on which a circular arrangement of numbers is painted. These numbers are intended to represent seconds so that the notation would read from zero to fifty-five entirely around the circum-



Details of bearings for the turnover type of clock



A general drawing showing essential features of a good starting clock

ference of a circle with dividing marks at the thirty degree points.

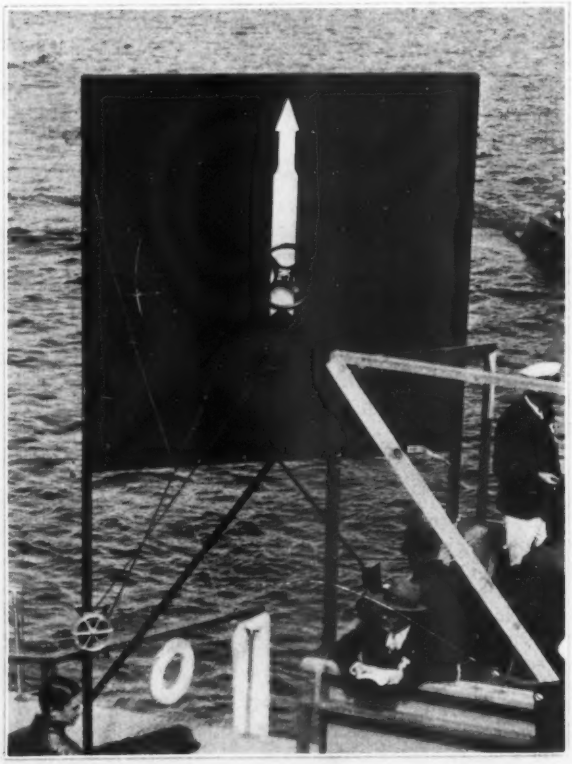
Usually at the start of any race a warning or preparatory signal is made by means of a gun shot five minutes before the scheduled time of starting. This gives the contestants sufficient time to reach a position of advantage and take their places near the line. As the starting time approaches, the timers stand ready at hand, and with the beginning of the last minute in this five minute interval, the pointer on the clock is started, and moves with the count of seconds, which is done in a loud voice by one of the timers.

The clock hand moves quite steadily around its dial, consuming one minute to complete the circle. As the hand approaches the fifty second point the contestants realize they have only ten seconds remaining and begin to edge up to the starting line. They can control their speed very nicely to keep just behind the starting hand so that when this reaches the sixty second position they are practically on the line with the starting gun.

In order to provide a movable pointer on the face of the clock, a large wooden hand is made which can be rotated around the axis of the circle in such a way as to indicate seconds during the last full minute before a race starts. One feature in connection with a clock of this kind must be constantly borne in mind. It must be remembered that the clock is provided for the particular benefit of contestants in a race and that the visibility from their point of view must be perfect. When one considers that the boats may be from one-third to one-half mile away from the clock, one will appreciate the necessity of being liberal with all dimensions in connection with such a device. Of prime importance is the matter of color and it has been found that a white back-ground on which the numbers are painted in a generous size and pointed to with a hand of exaggerated proportions stands out best. A clock face at least 10 by 10 feet, or better yet 12 by 12 feet, is none too large to permit quick perception on the part of the contestants. Drivers in fast boats approaching a starting line have many things to watch out for without having to spend valuable moments in trying to locate the starting clock, and then straining their eyesight in order to perceive the hand and numbers which give them the vital information. Most frequently they must judge the time element entirely by the position of the hand rather than the characters painted on the clock, since the figures are entirely too light to be conspicuous.

Occasionally a clock of this kind is arranged to serve a double purpose. This happens when there are a considerable number of laps in a race and a simple method of keeping track of laps is to have a series of numbers painted on the reverse side and a similar hand which can be pointed to the numbers as the race progresses. In this way, informing both the contestants and the spectators on which lap the leaders happen to be at the time.

Another point which (*Continued on page* 188)



Reverse face showing a duplicate hand and a convenient means of turning without climbing

An airview of a few of Winter Haven's 97 lakes which can be easily connected by short canals

FLORIDA'S INLAND WATERWAYS GROWING

Many of the Sunshine State's Great Inland Lakes being Connected by Canals Which Will Provide a Wonderful New Inland System

FLORIDA'S waterways will soon match its wonderful highway system. The Florida Boom was made possible through the completion of its splendid highway system which became known to hundreds of thousands of winter tourists, and now there is being planned an inland waterway system which will certainly prove a boon to the boatmen of America.

Most northern yachtsmen know that there is a completed inland waterway along Florida's East Coast from the Georgia State Line to Key West, composed of a series of short canals and so-called rivers and lakes of salt water. Among them are the Matanzas, Halifax and Indian Rivers, Lake Worth and Biscayne Bay. This they know is the extreme Southern section of the Atlantic Coastal Canal running from Maine to within 90 miles of Cuba and practically all completed.

What they may not know is that this route has now an access to Florida's inland system at more than six or seven places, and with a little work, routes up and down and across the State in several directions will be opened up. The Florida State Chamber of Commerce is sponsoring this movement with the united support of the Yacht Clubs of the State who have affiliated with the American Power Boat Association to obtain national recognition, and the boating activities of the Florida Outboard Motor Association have added additional impetus to this movement. It was in Florida, incidentally, that outboard motor boat racing has had great development, and to this cradle of the sport thousands of boating fans migrate for the series of regattas during the winter season.

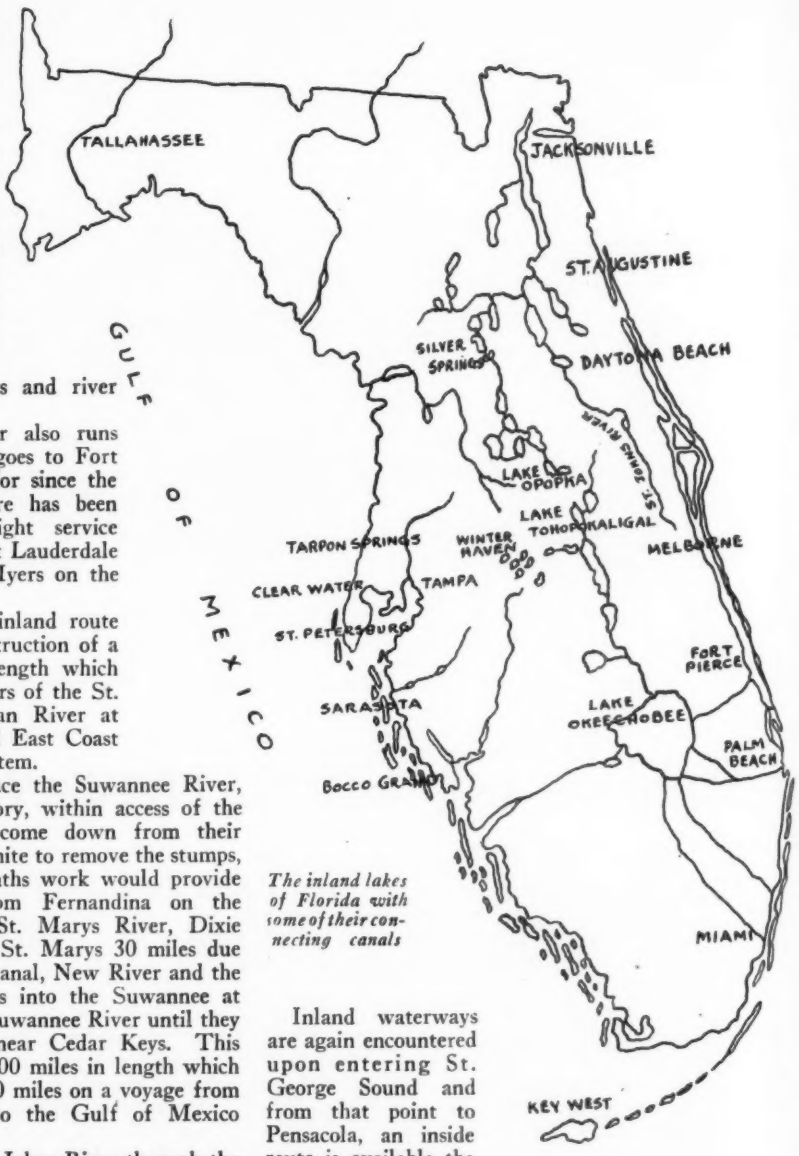
The map of Florida shows that the construction of a few short and inexpensive canals and the improvement of a number of streams will create for pleasure craft the greatest system of inland waterways in the world. The 30,000 lakes in the state, as well as the thousands of bays, bayous, streams and rivers, have at last awakened the interest of the Floridians, and the connection of these lakes and streams will probably start with one of the largest of the operations required. This is the connection of the Ocklawaha River, which is the southern extension of the St. Johns, and the northern end of the Kissimmee River, which flows south to Lake Okeechobee and from there in several routes to both the Gulf of Mexico and the Atlantic Ocean. The actual bodies of water to be connected there are Lake Apopka at Winter Garden and Lake Tohopekaliga at Kissimmee, a distance of about 19 miles, but actually this is shortened because Lake Butler, a body of water 8 miles in length, lies along the proposed route, hence 11 miles of canal through a flat sandy country is all that is necessary to produce a navigable continuous waterway from the mouth of the St. Johns River at Jacksonville down and across the State to the Gulf of Mexico at Fort Myers, or else to Miami or Palm Beach on the East Coast. This would

embody 500 miles of some of the most picturesque and tropical scenery that is possible to see on the North American Continent.

Lake Okeechobee will be the hub of the entire system and from this lake there are five great Everglades Drainage Canals that run to the Indian River at Stuart, Lake Worth, at Palm Beach, the Atlantic Ocean at Boca Roton, and at Fort Lauderdale and Biscayne Bay at Miami, all of them sufficient to take care of large yachts and river steamers.

The Caloosahatchee River also runs from Lake Okeechobee but goes to Fort Myers on the Gulf Coast, for since the canals have been built there has been regular passenger and freight service across the State between Fort Lauderdale on the Atlantic and Fort Myers on the Gulf.

Another entrance to this inland route could be formed by the construction of a canal not over 5 miles in length which would connect the head waters of the St. Johns River with the Indian River at Titusville, giving the central East Coast a definite position on this system.



The inland lakes of Florida with some of their connecting canals

Later it is planned to place the Suwannee River, long famous in song and story, within access of the northern boatmen as they come down from their homes. A few cases of dynamite to remove the stumps, a dipper dredge and six months work would provide a connecting waterway from Fernandina on the Atlantic Coast thrugh the St. Marys River, Dixie Creek, which flows into the St. Marys 30 miles due west of Jacksonville, a short canal, New River and the Santa Fe River, which flows into the Suwannee at Wanamaker, then down the Suwannee River until they reach the Gulf of Mexico near Cedar Keys. This would form a waterway of 200 miles in length which would save a small boat 1,000 miles on a voyage from the North Atlantic Coast to the Gulf of Mexico region.

After coming down the St. Johns River through the Ocklawaha River to Lake Apopka, a canal will be cut through to Lake Tohopekaliga at Kissimmee, then down the Kissimmee River to Lake Okeechobee, and from there either to the Atlantic Ocean or to the Gulf of Mexico, and in to the Gulf by way of the Caloosahatchee River to Fort Meyers, then there is a protected and natural waterway with but few short interruptions northward to Tarpon Springs, a considerable distance above Tampa.

Naples, Fort Myers, Punta Gorda, Boca Grande, Venice, Sarasota, Bradenton, Tampa, St. Petersburg, Bellaire, Clearwater, Dunedin and Tarpon Springs are all served by this route and are nationally known winter resorts and meccas for eastern and middle western yachtsmen. Tarpon and kingfish abound in these waters and keep many of the yachts down late in the Spring for this sport.

Then one can go still further northwestward to Apalachee Bay by a more or less outside route but with hundreds of sheltered bays, bayous and mouths of numerous rivers as temporary harbors should weather conditions become adverse.

Inland waterways are again encountered upon entering St. George Sound and from that point to Pensacola, an inside route is available the greater portion of the way by Apalachicola and Panama City. From there on to New Orleans very little outside water is encountered by the yachtsman. The few connections that are needed on this coast are now being planned by the United States Government or the State Chamber of Commerce, which is taking a leading part in the development of Florida's waterways.

Some of the local programs that have already been completed demonstrate the possibilities and show just what can be done in the way of inland waterway development. For instance, the City of Winter Haven has touching or within a five mile radius 97 crystal clear lakes with white sandy beaches and bottoms. In some instances they are separated by low sandy hummocks and ridges only a hundred or so feet in width and the construction of short canals of sufficient depth to accommodate outboards and motor boats has been accomplished very cheaply and quickly with drag line dredges. This has given the motor boat enthusiasts scores of miles of continuous waterways all within five miles of the city, and here *(Continued on page 194)*

Expect Greater Things from Outboard Motors in 1930

CAILLE RED HEADS

are on their way

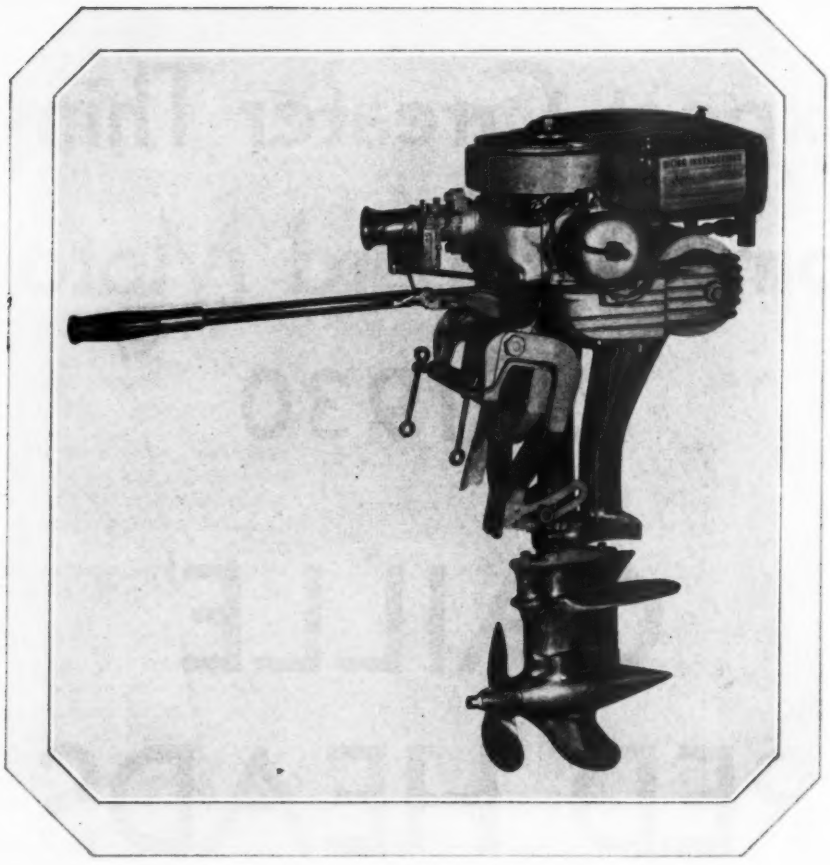
Caille Red Heads offer innovations in outboard motor design and construction which will make them outstanding

Caille Dealer Franchise still available in a few localities

See Them at the New York Boat Show—Booth 416

CAILLE MOTOR COMPANY

6210 Second Boulevard Detroit, Michigan



The Caille Red Head racing engine is made to fit both classes B and C

PERFECT CONTROL FOR OUTBOARDS

Interesting Development in Handling of Caille Outboard Engines Provides Ahead, Neutral, and Reverse Positions

WITH the announcement by the Caille Motor Co., of their new line of Caille Red Heads for 1930, outboard users, from racing fans to owners of light runabouts can be assured that the major problems of outboard power are solved. Five models by Caille are now in production—one Class A, two Class B, and two Class C—in other words, a Class A light weight sport motor and a Class B and C utility motor, and a Class B and C racing motor.

The Class B and C jobs represent the most interesting developments to be found in outboards for many years. Class B and C motors have electric starters and generators as optional equipment at slight extra cost, and are equipped with centrifugal water pumps, rather than relying on the old force feed. This keeps the motors at the correct temperatures at all times, whether running idle, or proceeding at top speed, guaranteeing the maximum horsepower delivery to the propeller under any conditions. Cylinders are accurately machined, and pistons balanced to insure an even flow of power—a practice which has long been standard in fine motor car manufacture.

Most interesting development from the standpoint of the average family user is the multi-flexible speed control on the utility motors. This gives a slow, or trolling speed forward, a high speed, neutral for idling, and a slow reverse speed, all controllable from one fixed position of the motor. Leaving and entering the dock, boathouse, or ship is as simple and easy as it could be with the most expensive runabouts, and stops comparable to the action of four-wheel brakes may be made by throwing the motor from ahead into reverse.

The introduction of a fast, reliable outboard with starter, and neutral for starting and stopping removes the last barrier to outboard ownership, because it adds the ultimate refinements to performance already outstanding. The same features, plus an unusually low center of gravity will make the Caille Red Heads the talk of the racing fraternity, giving as they do easy starting, balanced power, perfect cooling at any speed, and the ability to negotiate unusually sharp turns in absolute safety at the higher speeds these motors will develop. Much energy has been expended in experimental work which will put them among the outstanding engines this year.

O. C. LINTHWAITE

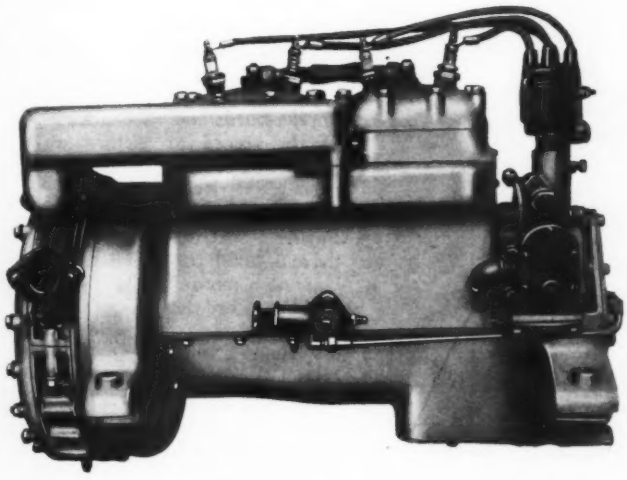
Announces

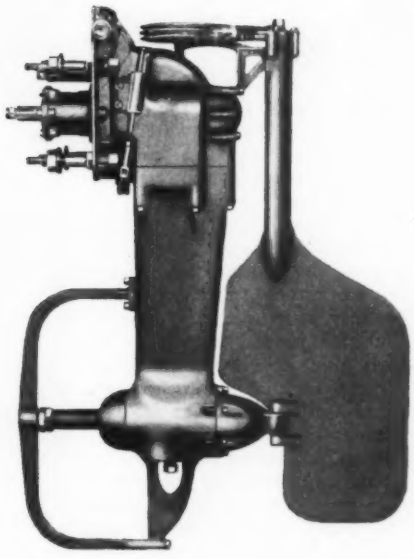
the

K. E. AHLBERG CO.

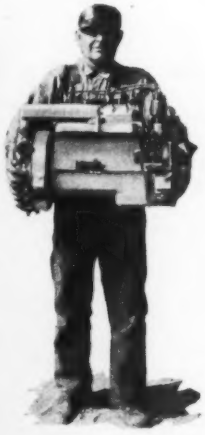
As Manufacturers Under License
of the

LINTHWAITE INBOARDOUTBOARD MOTOR





The Ahlberg Company has started on a limited production of strictly custom built outfits and will begin deliveries in March.



An outfit will consist of motor complete with reverse gear, starter, generator and supercharger, together with detachable outboard drive unit. Price with all connections $800. Brake horsepower is 50 H. P. at 4500 R. P. M. Weight two hundred sixty pounds.

Special Racing Engines Can Be Furnished

THE K. E. AHLBERG CO., Inc.
CULVER CITY, CALIFORNIA

ANY BOY CAN DO IT

California High School Boy and Outboard Record Holder Tells Own Story of His Initiation Into Outboard Racing

By BILLY LYON

WHEN I was first asked to write this article I could not possibly see how outboard racers in any section of the country could find anything interesting in what I might write. But it occurred to me that as very few of them live in Southern California I might try to pass on some of the information I have learned from some of Southern California's well known racers, during the short time I have been racing.

I never get high marks in English in Junior High, but here goes, anyhow. In the first place two things are necessary in order to set records—calm water and a calm water boat. I have never seen a case of a rough water boat making marvelous speeds when the water was calm. Choppy water and calm water take an entirely different kind of bottom for best results.

California drivers have made wonderful successes largely because they practically never encounter very rough water and so they have been able to work out fast boats. Besides, the season out here is twelve months against four or five in the East. One California driver in particular has won wide recognition because of his ability to make motors rev up faster than the rest of us. I do not mean to imply that he breaks any rules. However, I certainly think that it is not necessary to be a motor expert to set records. I know I am not one myself. Get some calm water, a real calm water boat, add a large measure of good common sense, and go to it. That's how I say "any boy can do it." Let me list what I did to my motor prior to the time trials of Oct. 6. After I bought it in August, I followed directions regarding breaking it in, very carefully. I did not take it for granted that I knew more about how a motor should be broken in than the factory did, nor did I let any kids run the motor who might have opinions of their own on the subject.

Billy Lyon, 14-year-old Class B record holder, in racing outfit

So it was that the motor had practically never been run wide open, before I took it down to inspect it a few days before the trials. After it was put together I tuned it carefully for a day or so on the boat I was to use. Then the night before the trials I sanded the inside of the carbureter, air horn and the lower unit and borrowed a propeller that was supposed to be practically true and that was all. That's where the common sense comes in. Many boys I know of work on their motors and do much more harm than good. One fellow twisted his water pipes so that the spray would shoot out behind. There was no reason for it except that he had seen another racer do it—and, well, it looked fast.

About buying a boat. There is only one way to choose a fast boat, and that is on performance, records and race victories. If the record or victory was made by a real hot motor or by the superiority of the driver, don't consider it when you are buying a boat, for you've got to drive your boat yourself with your own motor.

The records I set on October 6 last year were made with my Baby Brontosaurus II, a Crandall Comet racing hull built here at Newport Beach, California, by the Crandall Boat Company. The time trials were held in connection with the international races, run on October 6 and 7 in Newport Bay, and there was a crowd of people out to watch the races and trials, estimated between 25,000 and 35,000 people.

The motor I used in setting the Class B record was a Johnson Sea Horse 16 that gave me a speed of 36.185 nautical miles per hour, which is the equivalent of 41.613 statute miles.

It was impossible to finish all of the time trials on Sunday, October 6, and some of them were postponed until Monday. I couldn't miss the races so I took a day off from school.

On Sunday I was lucky enough to set a new record in two classes. The Class D record was 46.905 miles per hour, made with a Johnson 32 Sea Horse motor on the same hull that I used in Class B. That was the first time I had ever driven one of the larger D motors, being used to the smaller B class, and I didn't know just what to expect when I pulled the rope to start my trials in class D. You can imagine my feelings when I was told that I had set a new American record, three miles an hour faster than the old one.

AND NOW!

An Indian for the WATERWAYS

Indian Motocycle Company

Announcing

A NEW OUTBOARD MOTOR

Backed by 27 years of . . . . . successful motor manufacturing.

For twenty-seven years, INDIAN Motocycles have proved their superior performance in all parts of the world. Holder of the World's Motorcycle Speed record —victors in countless tests where reliability and stamina win out—and preferred exclusively by the largest Police Departments in the World—INDIAN has built a name for itself—founded on *performance rendered.*

Now—INDIAN offers to the discriminating sportsman an Outboard Motor—built to the same high standard of excellence—and delivering that superb performance so typical of INDIAN products.

INDIAN MOTOCYCLE COMPANY
SPRINGFIELD, MASS., U. S. A.

See it at the N.Y. sho

Spaces 411 - 412

Here is just the little boat you've been looking for

See it at Booth R, Mezzanine Floor, Grand Central Palace, January 17-25

The CHASE-EMERSON $995 MOTORBOAT

Powered with Van Blerck, Jr. Motor

$995 F. O. B. Norwalk, O.

Smart . . . yes, smart as the snappiest motor car you've ever seen. Sixteen feet of beauty and grace . . . . long, sweeping lines . . . . upholstered seats in harmony with the boat . . . . windshield, hardware and equipment all one symphony of masterful design.

Swift . . . speeding over the great clear water-highways at 25 miles an hour without any effort at all, for there's speed in her lines as well as in her engine.

Seaworthy . . . as at home in the water as a duck, but as agile as a sea-gull. She's dry, clean and easy-riding . . . . obeys every touch of the tiller as a high-bred horse responds to the bridle.

Safe . . . built to endure . . . . built with all the skill that Chase-Emerson craftsmen made their reputation on . . . . built of the finest materials produced in the world. She's every inch a fine boat, as safe as she is smart, swift and seaworthy.

DEALERS!

You've been looking for a profit-maker like this

The Chase-Emerson line is a boat dealers' heaven! Beautiful, wonderful Boats that make every one who sees them want to own one . . . . and at prices so low that they *can* own one. So far ahead of the field in boat-for-the-money are they, that taking on the line is like coming heir to a young fortune. And mind you, this isn't all "sales talk" either. Chase-Emerson Boats have already established a fast-selling record. Let us tell you what several dealers sold in the "off months" last fall.

Other Chase-Emerson Models will also be on display at the Show

A. B. CHASE-EMERSON CORP., 11 West 42nd Street, New York, N. Y.

CALIFORNIA'S MID-WINTER REGATTAS

Long Beach and Lake Elsinore Events Bring Competitors From East and West Together

By COMMODORE DAVID MACKAY

ALAMITOS BAY was once more the scene of rivalry between East and West when Carl Koeffler, National Class C champion, and H. G. Ferguson, National Class B champion vied with each other in the C class events. The races were especially close and exciting, so much so that no one knew who was going to be the winner until the actual finish of the race.

The feature race on November 30 was the Mackay Trophy, valued at $500, open to all up to and including Class C, Division II. This is a perpetual trophy to be run for annually and becomes the property of the contestant who scores three wins; there are also three permanent trophies for the winners each year.

The first heat was run at Alamitos Bay, the second at Elsinore and the final at Salton Sea.

Ten contestants roared down the foaming speedway at the crack of the gun and the battle was on; first it was Fergy then Carl and finally Al. took the leadership in one of the finest outboard events ever seen on the West coast. Al enjoys the crooked hazardous course and hair-pin turns, which from long experience he has learned to take like a past master. Fergy was handicapped by ripping a bottom plank loose and was forced to take the spray of both Black Maria and the Apache Kid.

In the Class C event Black Maria met hard luck when Jack Jordan in Miss Arizona side-swiped him and threw him out while the careening craft turning completely over in the air and landed right side up; Al calmly swam to the waiting boat, wiped off his spark plugs, pulled the rope and proceeded to finish the race.

The Class D event was won by Blue Streak in both heats. Ludington B-44 closely pursued the Streak; the able pilot of this Eastern boat was none other than the famous Jake Dunnell, of Boston, winner of the Albany to New York marathon.

The Union Oil Co. Trophy for ladies brought out some new and promising talent. Of course, and needless to say, all things being normal, Loretta, our own Sunkist Kid, captured the first honors, while second position was ably filled by Miss Margaret Mullin, running her first race—in fact she climbed aboard Blue Streak for only the second time in her young life. In this, however, she was outdone by the third winner, the courageous Miss Lois Blanchard of Long Beach, who made her maiden trip in the Ludington and finished third despite the fact she was fouled on the lower turn by Miss Glendale.

The Class B and D events were both captured by H. G. Ferguson in Blue Streak, winning from Bill Tuck of St. Petersburg, Florida, one of the Ludington Boat Team, without much ado. In Division I of Class B, Loretta Turnbull complained to the writer of the tameness of the racing, remarking that she was fixing her hair during the somewhat boring and tedious procession.

The first heat of Class C, Division I, was won by William Gambrell of Phoenix, driving Oo-La-La, in the second heat he capsized. Hell Bent with Gerard up, won; Miss Glendale, with Dr. Steelman, second; Black Ace, Don Miller, third.

The 151 Class was won, as scheduled, by Dick Loynes in his world-famous Miss California; his time was slower than that made by little Blue Streak. Frank Robertson of Houston, Texas, was second and Don Condit in Don Q was third.

In Division II of Class C occurred one of the most exciting races ever witnessed; the fact that both Carl Koeffler and H. G. Ferguson were equipped with Elsinore hulls and Evinrude motors was the underlying cause of the close contest. Our opinion is that Carl had the faster motor and Fergy a faster model hull; Carl took Fergy on the straightaways, while Fergy outnavigated Carl on the sharp turns. It was a short shaft against a long shaft motor. The Apache Kid won the first heat by a margin of two seconds, while Blue Streak won the second by a margin of one second, thus giving the race to Carl by one second difference in the total elapsed time for the series, these records tell of the race more eloquently than words. Carl led all the way to within fifty feet of the finish in the second heat, when Fergy got him on the turn. Vagabond, another Elsinnore hull, finished third, nine seconds behind Apache Kid.

In the first heat of Class D, Red Wing ran second to Blue Streak while Flash, driven by Jake Dunnell of Boston was third, Frank Anderson of Sacramento was fourth, Charlie Holt in Crandall Comet fifth, Ludington 18 driven by Dick Frost of Florida sixth.

The Aquaplane-Runabout race was won by Fred Ashbridge, Ray Simonson was second and Patsy McQuilken third.

THE LAKE ELSINORE EVENTS

East and West again clashed at the second two day mid-winter regatta of the Lake Elsinore Yacht Club, December 7 and 8.

The east was ably represented by Carl Koeffler, the National Class C Champion, from Milwaukee, Jake Dunnell, the Albany to New York marathon winner, Bill Tuck, of Boston, and Jack Frost.

Rough and smooth going were both provided, so that all types of racing craft were suited.

The Macrate and Shadowpoint, two of the three master trophies at stake were safely tucked away by Blue Streak Fergie in Classes C and D, while he also has a grapple hold on the Mackay circuit trophy, tieing with Al Thompson of Los Angeles in the first and second heats, but securing a slight advantage in faster total elapsed time for the two runs. The final heat is to be run on Salton Sea for this magnificent $500.00 master trophy.

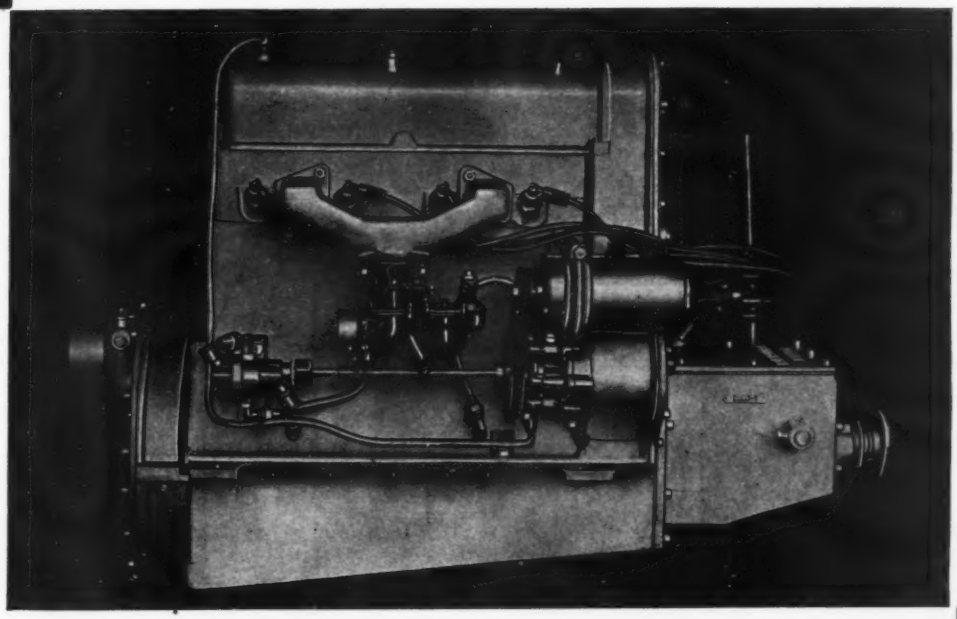
Commodore C. O. Murphy, of Coachella, while looking back adjusting his carbureter ran down a buoy, and although the impact knocked a good sized hole in the bottom of his boat, which squirted a stream of cold water in his face, Murphy kept on around the course and was almost able to make the lap before the hull disappeared beneath him as he turned toward the shore a few moments before sinking. (*Cont'd on page* 189)

VAN BLERCK JUNIOR

A Portable Inboard Motor

The basis of a new inexpensive racing class.

See this famous engine at the Motor Boat Show.



Tried and tested in service by hundreds of owners all over the world, reliability proven. For 1930, increased power, weight 165 lbs. complete, price $390.00 which includes reverse gear, generator and electric starter. Write for new catalog showing how to convert, and illustrating various makes of boats carrying Van Blerck Junior as standard equipment, also "How to Convert Your Last Year's Outboard Boat to a Late Model Inboard."

VAN BLERCK MOTORS · INC.

RED BANK • • • • NEW JERSEY

THE MONTH WITH THE OUTBOARDS

Items of Particular Interest to Followers of the Sport

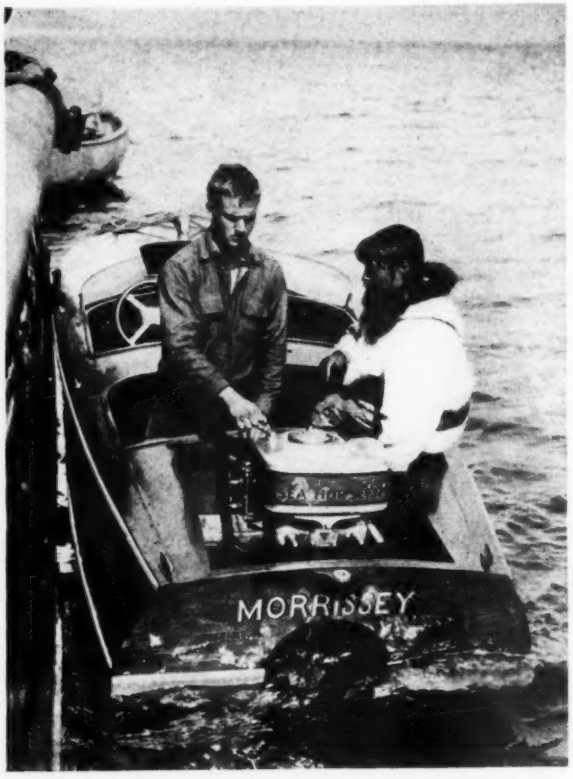
NEW OUTBOARDS HAVE SELF STARTERS

THE 1930 line of outboard motors soon to be announced by Outboard Motors Corporation of Milwaukee, Wisconsin, will include models with electric starters. This long-wanted development will make the reliability and ease of automobile starting an accomplished fact with relation to outboard motors. The electric self-starter gave tremendous impetus to the growth of the automobile industry, because motor cars so equipped were reliable, convenient and relatively safe in the hands of women and children, who otherwise could not handle them.

The new electric starter is a built-in part of the O.M.C. motors. The starter replaces the usual flywheel and is so designed that no moving parts are exposed.

It is certain that the electric starter will add greatly to the fast growing popularity of the Evinrude, Elto and Lockwood motors manufactured by the corporation. The increasing popularity of these motors has contributed largely to one of the outstanding industrial successes of the past few years, in spite of the fact that the manual method of starting has deterred a host of uninitiated from satisfying their desires to own an outboard powered boat.

The distinctive features of outboard motor design combining high power with light weight make it possible to conveniently and quickly transfer the power plant from one boat to another; also to transport the motor on the running board or elsewhere in a motor car, or as hand baggage. This type of marine power plant leaves the interior of the boat free and clean for passengers, camping equipment or other duffel. The light boat of shallow draft may operate safely wherever the water is a few inches deep without risk of damaging boat or power plant whereas the heavier inboard type of craft requires a safe depth of water under it at all times. The tilting feature of the outboard motor permits beaching the boat, which is a further advantage over the inboard type of power plant. The water-wise have long appreciated these advantages and the comparatively small first cost of an outboard engine and boat has brought many new enthusiasts to the water.



Captain Bartlett of the schooner Morrissey, on a recent expedition to the Arctic, explains the operation of his Johnson motor to an Eskimo chieftain

Now that the Outboard Motors Corporation will offer motors complete with electric starters, we may safely predict a tremendous increase in the use of outboard-powered craft. Last season Outboard Motors Corporation developed an underwater silencer which contributed largely to the comfort and pleasure of users and their friends on shore. Motors equipped with underwater exhaust are now in general use and are displacing the noisier models of previous years. With positive and reliable electric starting and the almost complete elimination of exhaust noises and fumes, outboard motors are destined to become the universal power for convenient, speedy water transportation and the source of more pleasing recreation for every member of the family.

EXPORT MARKET EXPANDS

T. L. Smith, general manager of the Caille Motor Company, Detroit, well known manufacturers of outboard motors, left November 30 for Europe to call upon Caille dealers.

"Caille export volume," Mr. Smith announced before he left, "has shown a remarkable increase during 1929 and the outlook for 1930 is still more bright. Just as the automobile was first popularized in the United States and later introduced to foreign markets, so is the sport of boating following the same path. Through the boating magazines and other means of contact, people the world over are coming to appreciate the possibilities of boating and to purchase in larger volume each year motors and other necessities offered for their use by American manufacturers."

ENGLISH OUTBOARD MAKES ENDURANCE RUN

An outboard motor has just succeeded in setting what is probably the first English Outboard Endurance Record.

The feat was performed at Portsmouth, England, and the Sea Horse-powered boat Sea Bee II was piloted by Jack Holroyd of Brude and Holroyd, Ltd., London. Holroyd drove the boat around a six-mile course for a total distance of 363.6 miles. Holroyd was the only driver and kept at the wheel for the entire 12-hour grind. Only 18 minutes were lost in four stops to refuel.

The average speed for the run was 30.3 miles per hour and this over a choppy course. This speed is even more remarkable when it is considered that the motor powering the craft was not a racing model but a standard service type engine. The craft too was a large one—a 16-foot passenger runabout.

The outboard motor performed like a charm throughout the run. It started the test after having just completed a 50-mile non-stop marathon, but Holroyd had no trouble with it whatever. Not even (*Continued on page* 190)

THE NEW CRANDALL CRAFT

15½-Foot Ocean Going Outboard Runabout

Turns in its own length with amazing suddenness at full speed.

Its high freeboard not only insures safety, but means a dry boat, even in the roughest water. This 15½-foot runabout has been given long and severe testing in very rough water on the ocean. Every attempt to upset the boat has failed. Its shallow draft, its unusual design, its beauty of line, its perfect balance with outboard motors, and its general utility promise to make it a runabout most popular for 1930.

Price $585

For complete details write for the January issue of the Crandall Craft Bulletin

A LUXURIOUS double cockpit sport runabout which rides the roughest water with speed and comfort. Completely equipped with lights, box cushions, large steering wheel, Vee windshield, and lifting rings. All mahogany, with cutwater fittings and trim of nickel silver.

CRANDALL BOAT COMPANY

NEWPORT BEACH, CALIFORNIA

Eastern Plant: Phelps, Wis.

COMBINATION POST LIGHT AND FLAG POLE SOCKET

For Class I and Outboard Boats

The sturdy one-piece construction of this light makes it ideal as a towing post. Made in one-piece casting: brass or aluminum highly polished.

T. & B. Type B. & B. Type

We save you money. Write for catalog showing prices and be convinced. We specialize in repairing propellers.

Racing Propellers for Outboards

BRYANT & BERRY PROPELLERS

1202 LILLIBRIDGE STREET DETROIT, MICH.

"UTE"

The All-Weather Utility Suit

LEADING OUTBOARD RACERS, PROMINENT YACHTSMEN AND MOTOR BOAT OWNERS ENDORSE UTE SUITS

UTE is being handled profitably by leading distributors and dealers throughout the country. Make arrangements NOW for the UTE agency. UTE is backed by national advertising, and closest selling co-operation, which will give you a big spring demand. Send for complete selling details AT ONCE.

We will gladly send descriptive literature and samples of cloth to any individual all over the world, requesting same.

UTILITY GARMENT CORP.
(Dept. M.B.)
309-313 Arch Street
Philadelphia, Penna.

You Should Read Every Issue of

MoToR BoatinG

The National Magazine of Motor Boating

Thirty-five Cents Per Copy

Place a yearly subscription now, so you will never miss an issue. $3.00 by the year.

MoToR BoatinG is recognized throughout the boating world as the finest marine magazine published. It is the most expensively edited magazine in the field. No amount of money or effort is spared to give you the latest news and the best features that can be produced.

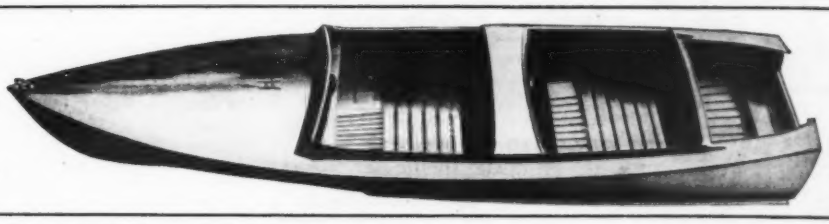
MoToR BoatinG, 57th St. at 8th Ave., New York, N. Y.

HARPOON

16 x 4½ ft. — $345.00

A fast, able runabout designed by a naval architect of recognized standing.

GEORGE F. CROUCH, INC.
MIDDLETOWN, CONN.



25th Anniversary of the
National Motor Boat Show

The RAJAH *Company*
also celebrates its
25th Anniversary

25 years of experience in designing and manufacturing ignition specialties is reflected in their exhibition at the National Motor Boat Show—Booth 100.

You are cordially invited to inspect the display.

The RAJAH Company
Bloomfield, N. J.

Speed WITH Seaworthiness and Durability

Stevens *Better Model* Boats

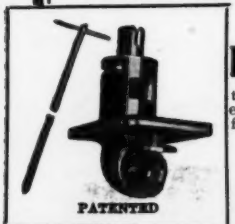
Down East Yankee-built, mahogany finished boats, within the price range of all. Fleet, safe speedsters in smooth or choppy water. You ought to have one.

Write for descriptions and prices of 1930 models.

STEVENS TANK & TOWER CO.
9 CENTER STREET AUBURN, MAINE
DEALERS: Ask about our new, profitable 1930 sales plan.

A PROFITABLE INSTALLATION
For The
BOAT BUILDER

that makes friends of customers through the greater comfort, speed and safety afforded.



St. Clair Self Bailer

The most successful and practical bilge-draining device on the market. Also releases bottom suction and rids hull of dangerous gas vapors. Positively automatic in operation. Simple and compact. Made of high-grade bronze. Designed for cruisers, outboards and every type of boat.

ST. CLAIR IRON WORKS
Dept. "B" ST. CLAIR, MICHIGAN
Canadian Branch: Courtright, Ont. *Detroit Branch: 8203 Woodward Ave.*

Write for catalog and state whether interested for inboard or outboard craft.

BUILD A STARTING CLOCK

(*Continued from page* 174)

should receive consideration is the direction in which the indicating hand is turned as seen from the contestant's point of view. A clock rotates definitely in a right hand or clockwise direction. The hand on our starting clock should rotate in a similar and accustomed way. Left-hand clocks, while they are built and handled in the same general way, are confusing to contestants who have not observed them previously.

The drawing which accompanies this shows a clock face which has been made ten feet in diameter. It is supported on a substantial frame work of four by four spruce joists of suitable length. If the clock is designed to be reversing it is necessary to provide a substantial bearing in the posts through which a suitable lag screw can be driven into the material of the clock itself. The bearing for the hand can also consist of a section of bronze or brass pipe through the clock face and in which a substantial piece of steel shafting, possibly ⅝ or ¾ of an inch in diameter may turn. The hand or arrow for both the inside and the outside faces should be generally similar in both size and shape to the one illustrated. An important feature in connection with this is provision for counter balancing the hand and also securing it most rigidly to the shaft. The reason for this is that a very long hand such as is necessary, weighs so much that it will have a tendency to sag at the tip, and when it is being moved in an upward direction it may lag sufficiently behind the supposed time to throw the clock out by several seconds. This discrepancy may conceivably be enough to make the difference between a good start and a bad start for some of the contestants. If the hand is counter-weighed it will not be subject to this torque and will also be easier to move about. It is equally important to secure the hand rigidly to the shaft. This should be done by means of a substantial flange which may be keyed or pinned to the shaft.

In order to increase the visibility of these starting clocks they have been mounted in an elevated position and the natural result of this was that the operator was called upon to climb a scaffold in order to reach this position. A better plan is one which puts a large grooved wheel on the clock shaft and operates by means of a belt from a position on the ground. One of our illustrations shows this arrangement so plainly as to hardly need any further explanation.

Boatmen are notoriously clever at manufacturing odds and ends for their use and the improvement of their boat. Now is the time for the regatta committee to spend a few spare evenings in fabricating a starting clock which can be used during the races next summer. The effort will not be very great and the cost will not be prohibitive. The results in improved racing will be very much worth while.

MISSISSIPPI ASSOCIATION CHANGES NAME

At a delegate meeting held a short time ago at Davenport, Iowa, of the membership of the new Mississippi Valley Outboard Association, it was decided that the name of the organization be changed to the Mid-west Outboard Association, due to a similarity of names of the old associations. The club is growing very rapidly having already a large membership and with a racing schedule completed for the coming season which calls for about a dozen race-meets throughout their section of the country, starting with Clinton, Iowa, on Decoration Day and ending with Peoria on Labor Day. Present prospects would indicate an especially rosy future for the new club.

R. D. WEATHERELL BRITISH CHAMPION

American speed pilots have a new mark to shoot at in the record of sixty-six victories out of seventy starts established by R. D. Weatherell of London, England, during the past season's competition in Europe and the British Isles. Mr. Weatherell, who has driven an Evinrude Speeditwin motor throughout the 1929 season, is recognized as a designer and builder of boats of note, and as a speed pilot par excellence.

In the season's racing, among other trophies, he has won the Duchess of York's trophy, coveted and competed for by all Europe, holds the championship of Belgium in the Class C and Unlimited Classes, the Championship of Yorkshire, the Class C and Unlimited Class Championships of Scotland, has established the World's One Hour Class C Record and Unlimited Class Record, is holder of the British Class C Mile Record, and the International Class C Mile Record, claims the record of the fastest lap ever made in continental competition at 42.7 miles per hour, and has to his credit an even larger list of remarkable victories.

Mr. Weatherell's performance in the season's competition, credits him with a group of victories which few American drivers can equal.

Advertising index will be found on 3rd last page

CALIFORNIA'S MID-WINTER REGATTAS

(*Continued from page* 184)

To Gerner of Fresno must be awarded the palm for a fast spill, he had just reached the finish line when in a wink he went over, a broken tiller cable revealed the reason for his sudden wing-ding.

The ladies heats on both days furnished great interest and some excitement when Miss Gibbs motor broke as she capsized and a piece of metal hif the Sunkist Kid as she shot past.

In the final heat Loretta Turnbull suffered a reverse and the Ladies Crown for 1929 passes to Miss Margaret Mullin, a sister member of the Lake Elsinore Yacht Club, who, though only running her second race, passed up the veteran Loretta in true sportswomanship, winning on a safe margin of 26 seconds, while Lois Blanchard also running her second race, finished a good third.

We congratulate the Class C Champion from Milwaukee on the showing he made under the circumstances, he was driving a borrowed hull and was outclassed by faster boats, next time he will bring his own equipment.

A popular win was that of Diamond C, driven by C. L. Covington, of Coachella, in Class B, for the O. K. Hunsacker trophy, closely followed by Chas. Holt in Crandall Comet, Blue Streak dropping a few revs fell back into third place.

Ten thousand spectators sat in their cars and watched the sports from the hillsides, while the pier and beach were crowded with intensely interested onlookers.

Music and boating information was broadcast to all quarters of the beach and pier by the courtesy of the Standard Oil Company, a service of inestimable value to the officials conducting the races and highly appreciated by the members of the Lake Elsinore Yacht Club.

Thirty-three of the thirty-four trophies at stake remained in the West.

Better luck to the East next year.

The 151 Class was cleaned up by Captain Dick Loynes in record time of 6:01 for the five miles. It was a procession with Don Q in the hands of Don Condit, and It piloted by Frank Robinson of Houston, while the rear was brought up by Smiling Dan, driven by Gus Walker.

The Shadowpoint, a perpetual trophy, for Class D boats, the gift of Mr. and Mrs. Harry L. Bayliss of Lake Elsinore, valued at $450.00, brought out a strong field. Blue Streak once more showed her transom to the eastern team which finished fourth and seventh, Dunnell of Boston and Dick Frost of Philadelphia filling those positions respectively.

The Macrate trophy also is a three-win gift by Rear Commodore Arthur and Mrs. Macrate of the Long Beach Yacht Club valued at $500.00.

Seth Smith of Mesa, Arizona, drove a fine race and finished ahead in the first heat in just one second slower than the fastest heat made by Blue Streak. He met with motor trouble and failed to score in the succeeding heats.

Carl Koeffler had trouble in the first heat, but finished third in the second, and second in the final heat which was the East's best showing, giving him a third trophy on points.

The Emil Aarup trophy for Division I, Class C drivers was easily captured by B. A. Wheeler in Vagabond, who consistently won all three heats, Bill Lyon, in Crandall Comet, was second, and Bill Gambrell, of Phoenix, in Oo-La-La third.

The aquaplane race was won by Fred Ashbridge in tow of an Ashbridge Flyer, R. P. Higgins by Relwah, Jr., was second, and Rupert Turnbull by Sunkist Mama third.

The L. A. F. Maes trophy for Class E was won by Fred Ashbridge in Flyer, R. P. Higgins was second and Rupert Turnbull third.

A special 5 mile event for drivers who were unable to compete on the first day of racing, was won by C. O. Murphy of Coachella, Dr. Steelman of Glendale, second, and B. Mitchell in Mercury, third.

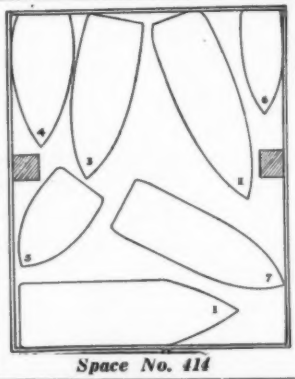
NIAGARA USES DUPLEX OIL

The Niagara Motors Corporation of Dunkirk, N. Y., to insure most efficient performance from their new models of 8-cylinder marine motors and maximum satisfaction to their owners, makes a practice of attaching a bronze plate on each motor recommending that Duplex Grade V Marine Engine Oil be used to insure best performance from the motors at all times. Further instructions are also supplied in connection with proper lubrication inasmuch as the Niagara Company realizes the important part correct lubrication plays in engine practice.

TRADE MARK
WOLF'S HEAD OIL
WOLVERINE · LUBRICANTS · COMPANY · INC.
A Revelation in Lubrication

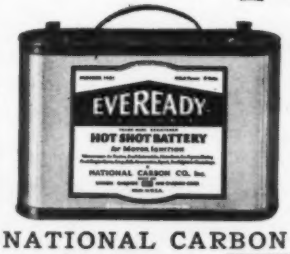
THE 1930 RACING RULES
will not necessitate any changes in the standard HOOTON BOATS. These boats were correct to begin with, and they exactly fit the new weight restrictions adopted for the good of the sport. Present HOOTON owners will profit by this foresight in design; new buyers can know they are getting a seasoned and proven winner in a HOOTON.

New HOOTON offerings will include this special racing deck as optional equipment at increased cost on the step models; and a new round bilge utility boat of great beauty and comfort.
GORDON B. HOOTON
505 GRANDVILLE AVENUE GRAND RAPIDS, MICH.



Space No. 414
Ready to serve you
Bruno Beckhard
Flushing Bridge
FLUSHING, N. Y.

WATER-PROOF *POWER!*



EVEREADY Hot Shots defy rain, waves and hard knocks. In 6, 7½ and 9 volt sizes. Sold in every port.
NATIONAL CARBON COMPANY, INC.
New York UCC San Francisco
Unit of Union Carbide and Carbon Corporation

One of the four refueling stops in Jack Holroyd's 12-hour 363-mile endurance run at Portsmouth, England

spark plugs were changed throughout the 12-hour grind.

The endurance run was carried out under the supervision of the Marine Motoring Association, England's governing board of boat racing.

LONDON REPRESENTATIVE VISITS ELTO FACTORY

J. W. Shillan, European Sales Manager for Elto Division, Outboard Motors Corporation, Milwaukee, has just spent two weeks at the Elto factory. This was Mr. Shillan's annual visit.

The year 1929 was the most successful selling season Mr. Shillan has ever had. He stated that Europe showed a material increase in the importation of American outboard motors and is rapidly taking advantage of this economical form of water transport and sport.

Outboard Motor Racing Clubs last year were formed in practically every country in Europe. In the British Isles alone, there are now nearly forty clubs, all holding several race meets during the season. Some clubs are running weekly meets, so the outboard owner in the British Isles is not obliged to race against the same competitors each week or under the auspices of the same club.

The outboard motor is not only being bought for pleasure in every country in Europe, but is now being adopted for many utility purposes. It does much heavy work among steamship companies, fishermen, freight-carrying barges, etc.

Elto Division is fortunate in having a very wide distributing organization throughout Europe. Shipments of Eltos were made to every country in Europe during 1929.

Mr. Shillan is very enthusiastic about the prospects of making a big increase in sales throughout Europe during 1930. He has seen the 1930 models and is very enthusiastic about the wonderful progress in the improved design and construction. He has also had the opportunity of having various conferences with the new executives who recently joined the Elto organization in Milwaukee, and he is of the opinion that great benefits will be derived by Elto dealers and Elto owners from this increase in the executive personnel.

Mr. Shillan is returning to Europe immediately to be present at the Paris Salon Nautique where the Elto will be prominently displayed and at which a number of Elto distributors in various countries in Southern Europe will be in attendance. He is also planning to visit Finland, Norway, Sweden, Denmark and Germany before Christmas.

A real water thrill! Skidboards skim the surface at high speed and are guided by shifting the weight of the body

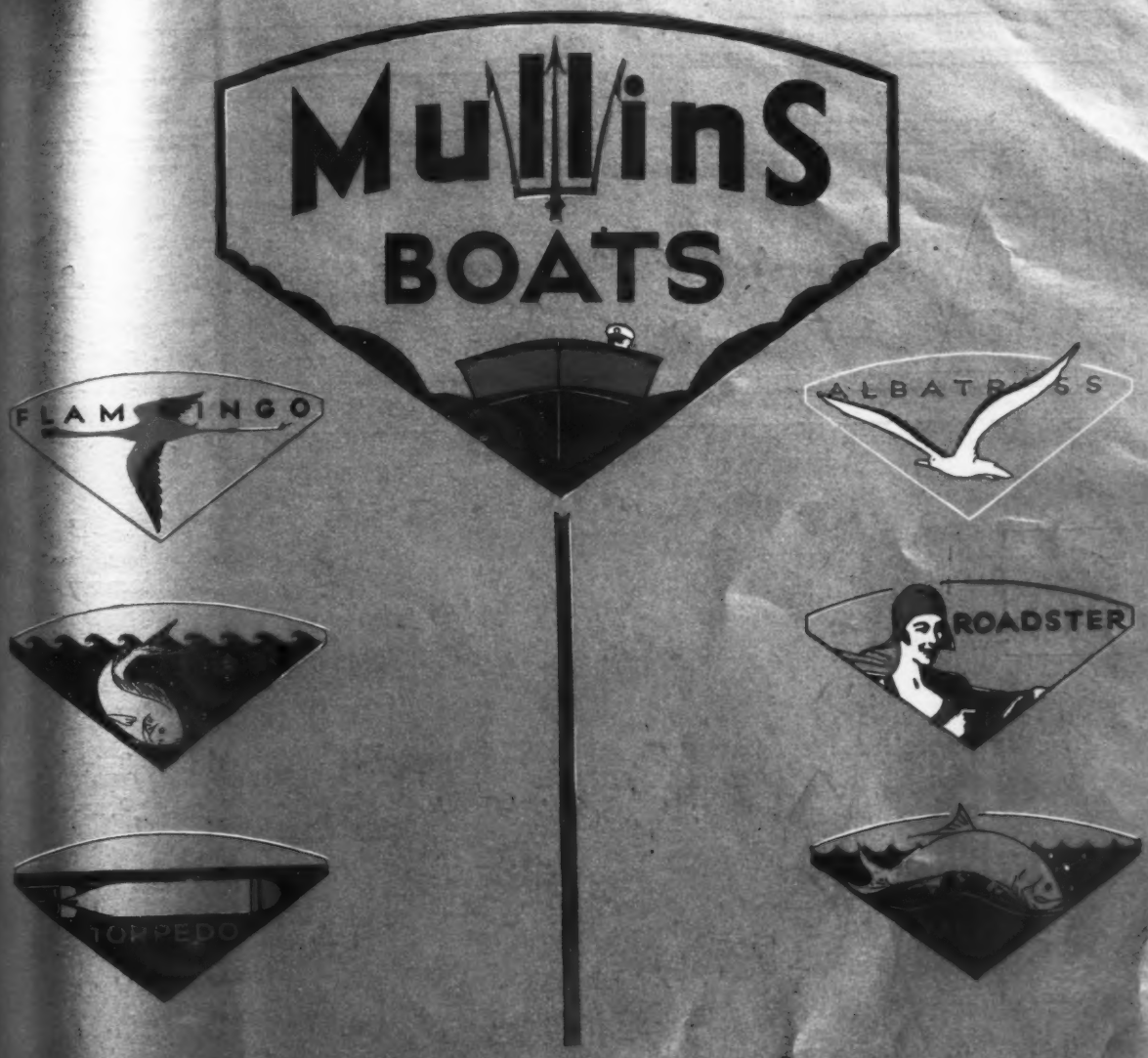
BURK TO MANAGE JOHNSON SALES

W. A. Burk has recently joined the Johnson Motor Company as sales manager of the boat division. He was previously sales manager of The Sea Sled Corp.

Outboard Motors Corp. executives: Ole Evinrude, pres.; J. W. Shillan, Elto's European sales manager; F. T. Irgens, chief of the engineering staff

Mr. Burk after leaving Toronto University, had four years of automobile factory training. Following this, he spent the next several years as Eastern District Manager for the same company working in the field with distributors and their dealers. He then became a distributor for Dodge automobiles in Westchester County, New York, and continued for nine years. He later joined the Johnson Motor Company as Eastern representative. He left their employ to accept the position of sales manager of The Sea Sled Corporation where he was also prominent in regatta activities in the east as Chairman of the Racing Commission of M.A.O.A., and has recently returned to the Johnson Motor Company as sales manager of the boat division.

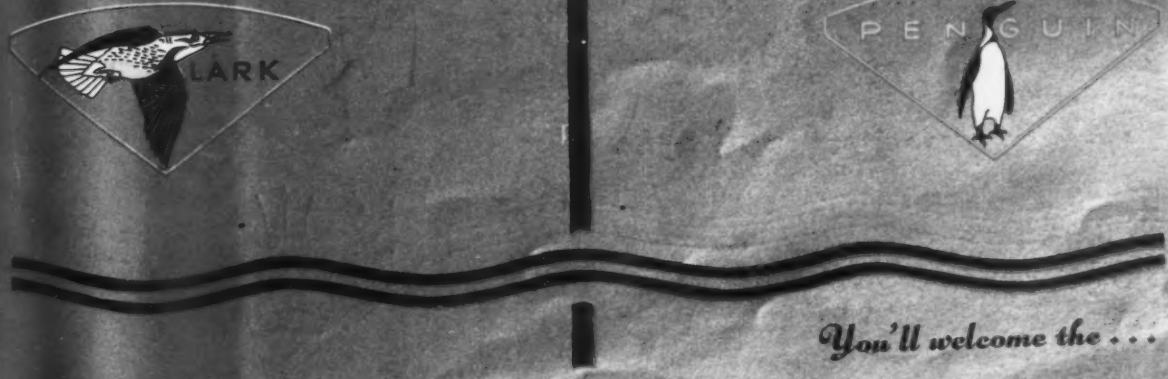
(*Continued on page* 194)



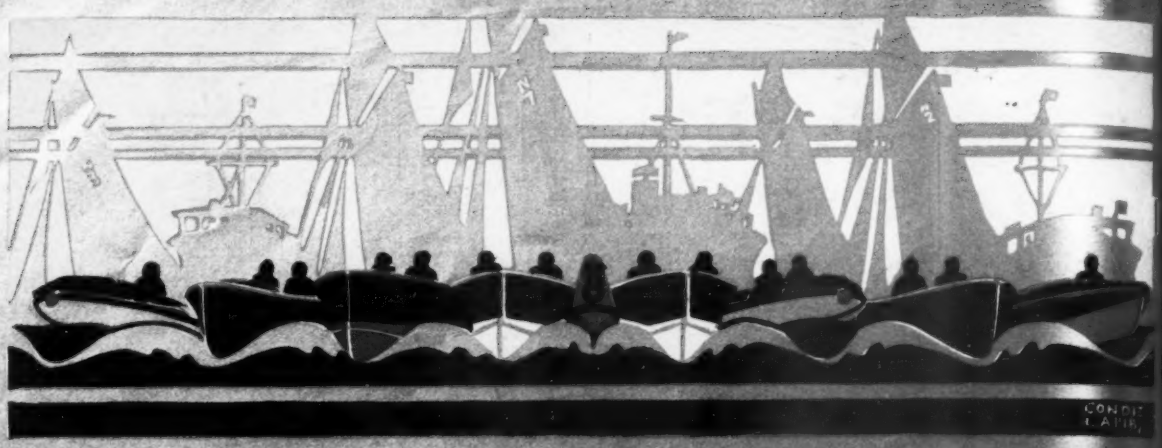
The greatest advance in outboard motor boats ever announced

Mullins Thirty-sixth Anniversary Fleet

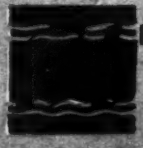
in brilliantly lacquered, corrosion-resisting metals



You'll welcome the . . .



Outstanding New Mullins Features



HERE they come . . . the record-smashing Mullins Thirty-sixth Anniversary Fleet. With them they carry everything that has made Mullins boats world famous for more than a generation . . . plus a whale of an extra dividend in new values.

Never before has there been such successful blending of beauty in line, finish and fittings . . . new color symphonies . . . guaranteed, leak-proof, puncture-proof, corrosion-resisting, unsinkable hulls . . . flashing speed . . . luxurious comfort . . . air-cushioned riding ease—and lifeboat safety.

Only Mullins could build such boats and, since first cost is the last, a Mullins is the most economical boat buy on the market. There is a Mullins boat to fit every purse. Prices begin at $150. Convenient terms of payment are available through dealers.

See these epoch-marking boats in their true colors . . . see their lines . . . their harmonious fittings and appropriate equipment . . . their sturdy construction—at the New York Motor Boat Show, Space 401, or write now for the 1930 Mullins Boat Book.

MULLINS MANUFACTURING CORPORATION
100 New Garden Street, Salem, Ohio.

No canvas to rip, no wood to split.

MullinS BOATS

PRINTED IN U. S. A.

COMING!!!

DEBASCO

1930 MODELS

all mahogany runabouts ranging in size from 17 to 24 feet, also standardized cruisers and outboard speed boats.

Built where men have been building good quality boats through several generations for more than 100 years.

DEBASCO BOAT WORKS, Inc.

Office:

Cor. Jasper & Willard Sts., Phila., Pa.

Plant: **Leesburg, N. J.**

Debasco runabouts will be displayed at the New York Boat Show on the Mezzanine Floor.

For information concerning available territory, communicate with Sales Dept., Jasper & Willard Sts., Phila., Pa.

CLIFF HADLEY

Nationally known Designer of runabouts and hydroplanes

WILL HELP YOU SOLVE YOUR MOTOR BOAT PROBLEMS

You may consult Mr. Hadley, during the N. Y. Motor Boat Show, January 17-25, any day during the Show, from 2 until 10 P.M. at OUR BOOTHS #87-88, Third Floor, Grand Central Palace, Lexington Ave. & 46th St., New York.

Mr. Hadley was the designer and builder of BUCKEYE II, winner of the cup given by President Machado of Cuba, at the Havana races, March 31, 1929; his hydroplanes won first, second, third and fourth place at the Albany races, July 4, and at the Red Bank races in August last, Hadley designed 'planes won first, second and third place in the Gold Cup 151 Class. In fact, Hadley craft are consistent winners.

This is an unusual opportunity which we are glad to offer, without obligation, to all boat enthusiasts, to secure expert advice, free of cost.

Mr. Hadley may be consulted during the Show ONLY at OUR Booths 87-88, Third Floor, Grand Central Palace, Lexington Ave. & 46th St., New York City.

INDIANA QUARTERED OAK CO.
222 East Ave. - - Long Island City, N. Y.
Philippine INDOAKO Wood — *"Best for Boats"*

THE

RAMSEYBOUT

IS THE REAL

FLORIDA PLAY BOAT

WATCH
the
1930 **HOOH** RACERS

Built by

A. H. RAMSEY & SONS, Inc.

P. O. Box 932 — 71 N. W. 11th Terrace
MIAMI, FLORIDA

Ashbridge Flyers

1930 stock model 14 ft. stepless family runabout. Fresno flyer makes N.O.A. official record of 33.79, Division I. Class E. with outboard novice. Duplicate boats win with ease all mid-winter runabout races with passengers, showing remarkable speeds with any motor. Finished with ½" mahogany, sides and bottom, equipped with wheel, weight 280 lbs., depth of hull 24", beam 59", two water tight bulkheads. Partially assembled $128.00. Finished $280.00.

Five New 1930 Race Hydroplane Models

ASHBRIDGE BOAT FACTORY
WILMINGTON, CALIF.

. . . and now, 1930

In fitting preparation for the New Year, LYMAN has developed a more complete and comprehensive line than ever before. A wide range in sizes from eight to seventeen feet enables the prospective purchaser to choose an outfit specifically adapted to his individual needs. Safe, seaworthy and serviceable, LYMAN Clinker-Built craft continues, as always, the carving of its particular niche in the outboard industry, by providing utmost quality, value and performance.

LYMAN BOAT WORKS
Foot of First Street — Sandusky, Ohio

New Class B National Champion
H. G. Ferguson did it with

BALUBRICOTE

THE BOTTOM COAT for FASTER BOATS

Read this statement of Comm. Mackay, Lake Elsinore:

"H. G. Ferguson, National Class B Champion and holder of sixteen American Records and two world's records, winner of the International British 'Field' trophy and the man who has made the fastest mile in an outboard drives an Elsinore boat painted with Balubricote."

(Signed) *Comm. Mackay.*

Ask your Dealer for BALUBRICOTE, or Order Direct from Makers—Quart, $2.50

BAHL CHEMICAL CO., 194 Elm St., Fall River, Mass.

We Specialize in All Types of Aquaplanes

AQUAPLANES

Scientifically designed, beautifully balanced, for towing—

SKIBOARDS

(Patents Pending)

The outboard-motor-propelled aquaplanes—

AKWA-SKEES

(Patented Oct. 17, 1925)

The sporty self-balancing double aquaplanes—

SURF-BOARDS

Standard type and genuine Waikiki Model—

DOLPH

A game played on Akwa-Skees, Skiboards and Aquaplanes

Interesting Proposition for Outbound Boat and Sporting Goods Dealers

Speed Model Akwa-Skees

Write for details and discounts.

SKIBOARD CORPORATION

72 HUBBARD STREET BROOKLYN, N. Y.

National Distributors of Water Sports Equipment

Booth 137 Motor Boat Show

Skiboards make thrilling races.

BARGAIN

STEP-SLED CABIN

SEDAN

$325

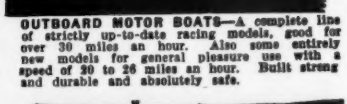
F.O.B. NASHVILLE

This is a splendid opportunity to get a real bargain. Has been used as demonstrator.

PATE-PARKES MFG. CO.

NASHVILLE, TENN.

Thompson BEATS the World on BOATS



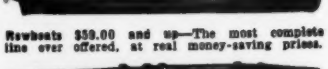
OUTBOARD MOTOR BOATS—A complete line of strictly up-to-date racing models, good for over 30 miles an hour. Also some entirely new models for general pleasure use with a speed of 20 to 26 miles an hour. Built strong and durable and absolutely safe.

CATALOG FREE!

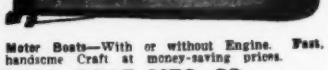
Save Money Order by Mail

Please state the kind of boat you are interested in

Two Large Factories



Rowboats $39.00 and up—The most complete line ever offered, at real money-saving prices.



Motor Boats—With or without Engine. Fast, handsome Craft at money-saving prices.

THOMPSON BROS. BOAT MFG. CO.

118 Ann St. Peshtigo, Wisconsin

Write to Either Place

110 Elm St. Cortland, New York

FLORIDA'S INLAND WATERWAYS GROWING

(*Continued from page* 176)

has been the hotbed of Florida's outboard racing and the racing in turn has brought many people to this popular inland resort. This was financed many years ago by a small bond issue with a half mill tax, and has proven to be a very wonderful asset to the community.

Lake County, which is only 1,047 square miles in area and yet boasts 1,400 sparkling lakes running in size from that of Harris and Griffin, each more than 15 miles in length, to deep spring fed lakes, in some instances hardly more than 50 yards across. Here we find Mount Dora, Eustice, Leesburg, Winter Garden, Apopka, Howey in the Hills, Taraves, and many other smaller cities situated on the edges of lakes which are all connected by a series of canals, and from all of them a yacht drawing 5 or 6 feet of water can sail directly to New York City by the portions of the inland water route now completed.

The Florida State Chamber of Commerce under a committee headed by Walter F. Coachman, advocates that the cost of completing the inland waterway system be defrayed from the fund now being created from the State Gasoline Tax of 6 cents per gallon, which normally goes for the construction of highways. For years motor boat owners and yachtsmen have paid this tax and, while automobile highways in the State have expanded until Florida now has 9,000 miles where 60 miles an hour or more can be made with safety, motor boat highways have not received their share. The State now nets approximately $12,000,000 annually from the gasoline tax and it is proposed that 1/5 of this sum be made available for the waterway project. This would make available $2,400,000 for this work and it is believed that only $5,000,000 will be necessary to complete at least the major portion of this project.

Florida is very fortunate in that its terrain is admirably suited for canals, that its rivers can be dredged at little expense, and that very few new bridges will have to be built where highways cross the water. In many places it will be merely necessary to put in a big dipper or drag line and the obstacles immediately fade away.

MONTH WITH THE OUTBOARDS

(*Continued from page* 190)

HERBST & DAVIS INDIAN REPRESENTATIVES

The Indian Motocycle Company of Springfield, Massachusetts, manufacturers of a new outboard motor known as the Indian Silver Arrow, makes announcement of the fact that two nationally known outboard motor experts have been recently added to their staff. Julius T. Herbst, formerly manufacturer of the famous Herbst record-breaking boats and a racing driver of considerable note, has been appointed sales supervisor for a particular territory which as yet has not been announced. Mr. Herbst has had a wide experience in the outboard field and has an acquaintance with outboard motors and the outboard market, second to that of very few men in this country today.

R. Ed Davis, holder of various world's records and a prominent southern racing driver, has been appointed an Indian factory representative and is now in Florida doing sales work with the new Indian Silver Arrow.

NORRISTOWN MILE TRIALS

Mile trials were held by the Norristown Motor Boat Club of Norristown, Pennsylvania, on the Schuylkill River, Sunday, November 10, 1929. T. F. Maloney, driving his C Class Mia Norristown averaged 40.15 miles per hour in the C Division with an Evinrude Speeditwin for power. W. B. Tuck driving an experimental Ludington boat in the B Class made 38.09 with a Johnson 16, and with another experimental hull owned by Ludington Aircraft, Inc., he attained a speed of 40.32 miles per hour with a B Class Johnson 16. 39.16 miles per hour were made by Joseph Chance driving Dr. Sharp's Microbe with a Class C Speeditwin.

WINNERS AND CHAMPIONS

At the National Outboard Championships held at Peoria, Illinois, this year, it is interesting to note that the winners in all classes, A, B, C, D and E were all equipped with motors driven by Champion spark plugs. Douglas Haskins of Boston in Class A, H. G. Ferguson of Los Angeles in Class B, Carl Koehler of Milwaukee in Class C, Dick Upsall of Bass Lake, Indiana in Class D, and F. C. Ludolph of Chicago in Class E—all agree that the consistent performance of their Champion plugs had a great deal to do with the faultless running of their motors.

Advertising index will be found on 3rd last page

A Consistent Winner!

To WM STANNUS TELEGRAM

WON FIRST PLACE HERE TODAY IN FREE FOR ALL USING YOUR NINETEEN INCH PROPELLOR INCREASED MY SPEED OVER TWO MILES AN HOUR OVER PEORIA SPEED YOUR NEW PROPELLOR IS A WONDER CONGRATULATIONS DICK UPSALL

Dick Upsall, like other speed leaders recognizes the proven superiority of the Stannus Propeller. Stannus leads the world in design and production of fast wheels.

FOR SPEED!

35 years of experience makes possible the exclusive design which brings out the maximum speed of your boat through using the Stannus wheel.

Increasing Our Facilities

Due to our rapid growth we have greatly increased our facilities under the name of the Stannus Propeller Corporation. Mr. Stannus is now free to devote his entire time to design and experimental work.

Genuine Stannus Wheels bear our Name

STANNUS

PROPELLER CORPORATION

4091 BEAUFAIT—DETROIT, MICH., U. S. A.

CAPE COD BOATS

Don't Buy a Boat
until you have seen our exhibit.
Grand Central Palace
Jan. 17-25, 1930

Main Floor:—

GRAND CENTRAL PALACE

18′ Cape Cod Baby Knockabout
15′ Junior Sailboat
14′ Decked Sailing Skiff

Mezzanine Floor:—

GRAND CENTRAL PALACE

20′ Runabout 4-Cycle 4-Cylinder Niagara Motor
NEW Family Runabout with Van Blerck Junior Motor
NEW 16′ Sea-going Fishing Boat with Van Blerck Junior

Fourth Floor:—

GRAND CENTRAL PALACE

Cape Cod Row Boats
Swimming Floats and Diving Boards
Outboard Motorboats, etc.

Cape Cod Ship Building Corporation

Showroom, Main Office and Works, Wareham, Mass.
Branch Office, 18 Tremont Street, Boston, Mass.

You Can't Sink

WHEN YOU WEAR

KAPO COAST GUARD VESTS

Style No. 7-C

4 times more buoyant, 10 times more comfortable than cork

Your choice. O. D. or white. Easily adjustable. Comfortable. Absolute life protection for Speed Boating, Yacht Racing, Canoeing, etc. If dealer can't supply, order Style 7-C direct and state chest measure.

24-30 Chest...	$8.00	38-44 Chest...	$ 9.00
32-36 Chest...	8.50	46-50 Chest...	10.00

Remember, these are Life Preservers
Beware of Imitations
Look for the original Kapo "Celbasilk" Label
There are many imitations
Insist on the genuine—made only by

KAPO PRODUCTS CO.
Dept. M, 76-88 Traverse St., Boston, Mass.

Where to Cruise

By F. W. HORENBURGER, C. E.
Book of Motor Boatmen's Charts with Valuable Cruising Data

37 detail charts of the eastern seaboard, sounds, bays and harbors, covering the entire Atlantic coast.
10 detail charts of principal rivers, lakes and canals.
9 detail charts of the Great Lakes.

56 charts in all, bound in a book 8½" x 11¼".

THE most suitable courses from all principal ports and harbors are given, as well as magnetic courses and bearings, distances in statute miles, all principal lights, buoys, etc. They have proven invaluable to motor boatmen while cruising or planning a cruise.

A number of suggestions for interesting cruises and several complete cruises are also outlined with considerable detail.

No motor boatman who likes to cruise away from home waters should be without a copy of "Where to Cruise" (Vol. 6) MoToR BoatinG Ideal Series.

Price $2.00 Per Copy

Foreign Postage, 50 Cents Extra

MoToR BoatinG

57th Street at 8th Avenue, New York, N. Y.

Don't Miss The Show Exhibit of

BRANFORD CONTROLS

FEATURED IN THE E. J. WILLIS SECTION
3RD FLOOR, BOOTHS 77-82 INC.

THE MALLEABLE IRON FITTINGS CO., BRANFORD, CONN.
Eastern Distributors: E. J. Willis Co., 85 Chambers St., New York City

New Crandall Comet Records

49.34 M. P. H.

Made by H. C. Ferguson at Balboa, Cal., Dec. 4th

This is the fastest official outboard speed ever made

14 year old "Billy" Lyon, who broke all B & C class speeds with his Crandall Comet

43.94
CLASS B
DIV. 2

43.97
CLASS B
DIV. 1

"Crandall Comet C-3"
Driven by
Charley Holt

"Baby Brontosaurus II"
A Crandall Comet
Driven by Billy Lyon

Write for the "Crandall Craft" Bulletin, January issue, for the complete story of these record breaking time trials.

CRANDALL BOAT COMPANY
Newport Beach, California
Eastern Plant: **Phelps, Wisconsin**

OUTBOARD NOTES

N. O. A. PUBLISHES YEAR BOOK

Plans have been completed by the National Outboard Association for the publication of a year book or manual which is to be distributed to all members, following a more or less widespread demand for various sorts of racing information and other items of general interest to small boat owners.

The manual is to be in the hands of members by the early part of January and will contain a personal message from Secretary G. O. Hoehn. This message will tell of the association's accomplishments during the first year of its existence and outlines such plans as have been formulated so far for the future. Constitution and by-laws, of course, will be included as well as official racing rules, marine traffic rules, the ethics of outboarding, and a great deal of other valuable information.

N. O. A. CONVENTION TO BE HELD IN NEW YORK

With the opening of the Silver Anniversary Motor Boat Show, the National Outboard Association celebrates its first birthday, since it was organized last year at the Show by a little group of outboard enthusiasts for the purpose of forming an organization that would render national service to small boat owners. Its success in accomplishing its object is attested by the records of its performances the first year. In the nine and one-half months that the association has been functioning it has acquired over 5,000 members and 115 clubs in thirty-five states.

Secretary Hoehn has made extensive plans for a convention to be held during the course of the Show on January 21 and 22 at the Hotel Roosevelt, New York City. National officers for the year will be elected and a program will be arranged including the discussion of various topics of interest to outboard owners.

NEW DEE WITE PLANT EXECUTIVE

In line with its standard policy of securing the best available talent in the boating field to supervise the production of the 1930 Dee Wite motorboats, the Dwight Lumber Company of Detroit announces the appointment of J. D. Brusstar as plant superintendent.

Mr. Brusstar is no stranger to motorboating enthusiasts, especially on the Pacific Coast, where he first served his apprenticeship under his father, N. S. Brusstar, one of the most famous naval architects of his day. Prior to 1928, after doing war work for the U. S. Shipping Board with the Gulf Coast Guard, he entered a three-year partnership with his father, following this with five years' of operating his own yard. It was during this time that he designed and built several yachts that are still outstanding in their respective classes.

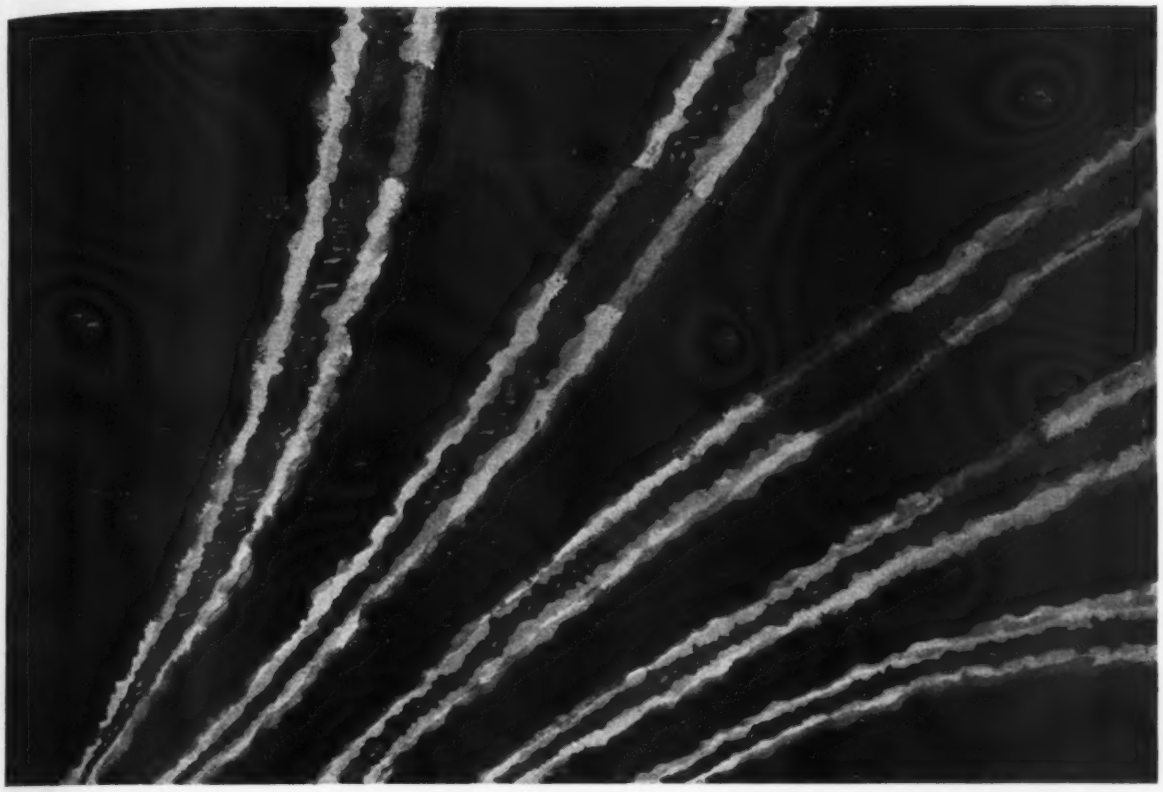
The year following found Mr. Brussar with the Dodge Boat Works, where he filled the position of plant superintendent, and it was from this famous yard that he comes to augment Dee Wite's already very complete staff of naval experts. Mr. Brusstar will have direct charge of all manufacturing and assembling operations within the plant itself, and will no doubt be able to set a standard of excellence in construction that will compare favorably with the highest priced lines on the motorboating market today.

NEW BOAT DISTRIBUTOR ON WEST COAST

In the early part of October of last year a new firm of merchants in the boating industry opened a large display room for the distribution of pleasure boats in San Francisco, California. Boardman & Flower is the name of the new concern which has the franchise for the northern California territory for Matthews stock cruisers, Gar Wood runabouts, Chase-Emerson and Tregoning outboard boats, Richardson Cruisabouts, as well as the Elto line of outboard motors and Sterling engines.

George C. Boardman, Jr., head of the firm, was formerly in the real estate business in northern California, and is the son of George C. Boardman, Sr., former president of the real estate board of California and vice-president of the National Real Estate Organization. Mr. Flower has for a considerable period been associated with the automobile industry, and both he and Mr. Boardman bring to the boat industry a broad experience and diversified knowledge of merchandising methods. The opening of the show room was a tremendous success and since that time the concern has been most successful in the distribution of its products.

Advertising index will be found on 3rd last page



5

NEW WAKES
will be followed this Season

1
THE SPORTSHIP
(Inboard Powered)
The Sportcar of the Waterways
Not a Converted Outboard

2
THE SPORTSHIP SENIOR
(Inboard Powered)
The Sportcar of the Waterways
Not a Converted Outboard

3
THE LIGHTNING
New Design for "A" Motors

4
THE ROCKET
New Racer for "B" & "C" Motors

5
THE FLASH
New Design for "D" & "E" Motors

Racing Boats are of new design and built to conform to the new weight regulations.

Ludington sets the Pace for 1930 with a New Line of Winners. Truly Engineered—From Keel to Sheerline. Dunnell, Designer.

SEE THEM

in our two booths—401, 4th Floor and R—Mezzanine Floor
Motorbot Show, Jan. 17-25

LUDINGTON

LUDINGTON AIRCRAFT, Inc.
HYDRO DIVISION
808 Atlantic Bldg. Philadelphia, Pa.

LACONIA BOATS

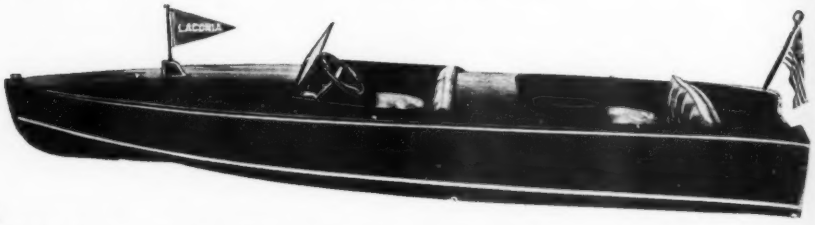
A Few New Boats - - - Discontinued Models

AT HALF PRICE

THE SPECIAL

$250

F. O. B. LACONIA, N. H.



Only a Few LACONIA SPECIALS Available at This Price

Retail Price was	$490
PRESENT PRICE IS	250
SAVING	$240

A sixteen foot De Luxe model, fully equipped—windshield, steering wheel, throttle control forward, special fittings, lights, upholstery, linoleum covered floors, handsome wood paneling inside cockpit—the last word in an outboard runabout.

THE SPEEDSTER

$99

F. O. B. LACONIA, N. H.

Only a Few SPEEDSTERS at This Clean-Up Price

Retail Price was	$199
PRESENT PRICE IS	99
SAVING	$100

All brand new and have never been in the water. They are fully equipped with lights, all hardware, upholstery, etc. Regular production run to Laconia high standards of excellence. YOU WILL NEVER HAVE SUCH AN OPPORTUNITY AGAIN—WE SUGGEST YOU SEND YOUR ORDER BY WIRE.

We have also a few used demonstrating boats at big price reductions, and a few outboard motors used in testing and demonstration.

This small lot of boats offered at extremely low prices, subject to prior sale

LACONIA CAR COMPANY

LACONIA, NEW HAMPSHIRE

Advertising index will be found on 3rd last page

MoToR BoatinG's Ideal Series

Volume I

Designs of Ideal Motor Boats and How to Design a Motor Boat

THIS volume describes in detail how to design a motor boat. It also contains complete plans for 30 Cruisers, Runabouts and Auxiliaries. The plans include lines, table of offsets, interior plans, profiles, construction details, etc. There is no other book published at the present time which describes in everyday language the details of designing a boat according to your own tastes. The plans of Ideal Cruisers, Runabouts and Auxiliaries are complete in every particular. They include the best of the plans published in MoToR BoatinG during the past several years. The plans include boats of from 20 feet in length up to 60 feet. The drawings are all to scale and large size.

THE CONTENTS OF VOLUME I

HOW TO DESIGN A MOTOR BOAT
An easily understood discussion of the elements of motor boat design. This chapter covers the fundamentals in a logical way, describing first how to properly start the design, the laying out of the mid-ship section and the drawing of water lines, sheer lines, daigonals and buttock lines. The determination of weights and trim is carefully explained and a section is devoted to the problem of designing to a given displacement. The author's idea throughout has been to present the subject in a non-technical manner for the benefit of those who have no specialized knowledge of the subject.

HIKE YOU, A 20-FOOT SKIMMER
Complete specifications and instructions for building an attractive V-bottom displacement runabout capable of 28 or 30 miles per hour.

GOBLIN, A 20-FOOTER
An easily built little 25-mile water runabout which will bring to the owner the joy of motoring on the water.

PANTHER, A 20-FOOT HYDROPLANE
Panther is a V-bottom hydroplane model with speed possibilities of about 40 miles per hour with a four cylindered 100 horsepower motor.

MAGNET, A 21-FOOTER
A handy little runabout of sturdy construction designed to meet the requirement for a general purpose boat rather than a purely high speed creation.

AMERICA, A 21-FOOT CRUISING RUNABOUT
The ideal boat which combines the speed of a fast runabout wtih comfortable accommodations and substantial construction to adapt it to week-end cruising and camping trips. Just the type for two or three persons for summer cruising.

CURLEW, A 22-FOOTER FOR OPEN WATERS
Curlew is the type of runabout which will appeal to the man who does not care to restrict his boating to protected waters. She is a round bottom type and easily obtains a speed of 16 miles per hour.

SANDPIPER, A 24-FOOT V-BOTTOM
Sandpiper is a 24-foot V-bottom boat well suited to use in open waters. With its abundant floor space it makes a very practical boat for knockabout service.

L'ALLEGRO, A 25-FOOT V-BOTTOM SHIP
L'Allegro is one of those fast and trimly designed runabouts which secures speed and comfort without the sacrifice of sea-worthiness in a heavy sea or dryness in a bad chop. A speed of 20 miles per hour is provided.

TUNA, A 27-FOOT SHALLOW-DRAFT V-BOTTOM CRAFT
A craft of easy draft which has no difficulty in navigating shallow bays and exploring about in coves and rivers. At the same time she is an able craft in deep water and dry as well in choppy seas.

ZORA, A 28-FOOT ROUND-BOTTOM BOAT
A 28-footer intended for use as an all-around boat for river and bay work, with an abundance of room and large cruising radius.

TRIDENT, A 24½-FOOT V-BOTTOM CRUISER
A well proportioned cruiser, 24½ feet in length, 6 feet 3 inches beam and 2 feet 1 inch draft. Accommodations are provided for two or three people on week-end trips and she makes an ideal craft for fishing and day sailing as well.

CYGNET, A 25-FOOT CRUISER WITH TRUNK CABIN
An honest to goodness cruiser for two people on a water-line length of 25 feet. Cygnet is an able raised deck boat which appeals at once to the eye.

HALCYON, A 28-FOOTER THAT'S DIFFERENT
Halcyon is an interesting trunk cabin design which provides a comfortable cruising boat with plenty of accommodations on a comparatively short length.

FLASHLIGHT, A 30-FOOT V-BOTTOM
An easily constructed 30-footer of V-bottom design with a raised deck of racy lines and equipped for convenient one-man control.

DAWN, A DOUBLE-CABIN BRIDGE-DECK CRUISER
Dawn measures 32 feet in length and has a beam of 8 feet 6 inches. The double cabin arrangement supplies comfortable sleeping quarters for a party of four in separate state rooms with plenty of space left for all necessary accessories. Dawn will cruise comfortably at approximatey 10 miles an hour.

SUNRAY, A 36-FOOT DOUBLE-CABIN CRUISER
Sunray is a very practical and sensible type of double-cabin cruiser which will handle a cruising party of four very conveniently on extended trips.

SPOOK, A 36-FOOTER WITH UNUSUAL ACCOMMODATIONS
Spook is an attractive double cabin cruiser which departs somewhat from customary practice, and secures at the same time a very clean-lined and able cruising boat.

RUTH, A 38½-FOOT DOUBLE-CABIN CRUISER
Ruth is one of those real cruising auxiliaries which is able to go anywhere in any kind of weather. She is a double-ender, raised deck fore and aft with cockpit amidships and equipped with auxiliary sails, ketch rigged.

JERRY, A 40-FOOTER WITH SMALL SAIL
While the sail plan calls for a rig of moderate area, Jerry will foot along very nciely in a good breeze. A long low raised deck makes Jerry a most attractive looking ship and gives abundant space for cruising accommodations.

PENGUIN II, A 20-FOOT YAWL WITH 10 H. P.
In Penguin II, we have another of those 50-50 combinations which is the answer to the demand for an ideal cruising boat. Penguin is a one-man boat with complete accommodations for cruising.

DRIFT, A 20-FOOT SLOOP
For those who prefer the sloop rig with a small cabin for protection from the weather and an engine to help out when the breeze is light, Drift should be particularly appealing.

VICTORY, A 21-FOOT CATBOAT
Victory is a handy little shallow draft cat boat of V-bottom construction with a small engine for auxiliary power. An excellent boat for two persons on short cruises.

BONITA, A 25-FOOT KETCH
Bonita is an auxiliary ketch which is intended principally for rough water cruising under sail. For short cruising or for day pleasure or fishing trips in open water, Bonita's design is ideal.

VOLANTE, A 25-FOOT WATERLINE YAWL
A boat of unusually strong construction and one which will handle well under all conditions. She is fitted with two bunks and other cruising accommodations, and carries a small motor for auxiliary power.

WHITE CAP, A 26-FOOT SLOOP
White Cap's lines are those of the New England dory glorified, with a bold sheer, plenty of freeboard and a neat low trunk cabin amidships.

LITTLE PAL, A 23-FOOT CATBOAT
Little Pal is a handy little boat with catboat rig. A low trunk cabin of considerable length is arranged amidships in which plenty of comfort will be found for a couple of people.

GOB, A 28-FOOT V-BOTTOM AUXILIARY MOTOR BOAT
An especially fine auxiliary having a surprising amount of accommodations and elbow room. She is of good, sound V-bottom constructoin and makes better than 10 miles an hour.

CARINA III, A 30-FOOT YAWL
Carina III is a 30-footer that handles to perfection under all conditions and as a singlehander is a most practical boat. A low house amidships provides a great deal of comfort in bad weather as well as many cruising conveniences.

CHESTER, A 35-FOOT YAWL
Chester is designed primarily as an able and sea-worthy craft, staunch enough to withstand any blow that she might encounter. All in all Chester is a very wholesome and sea-worthy little craft.

JOSEPHINE, A 35-FOOT V-BOTTOM CRAFT WITH 15 H. P.
An attractive boat designed primarily to be a good sailing vessel. Beyond that she has exceptionally complete appointments and is a husky craft throughout.

INDRASHAMA, A 35-FOOT SCHOONER
Indrashama is a double-ender and heavily constructed. An excellent boat in bad weather and able to stay at sea in any kind of a blow.

PIRATE, A 60-FOOT KETCH
Pirate is ketch rigged with adequate sail area to propel her at a good clip and has in addition a 40 horsepower motor capable of driving the boat at 8 miles an hour.

Price of Designs of Ideal Motor Boats, and How to Design a Motor Boat, Vol. I $2.00

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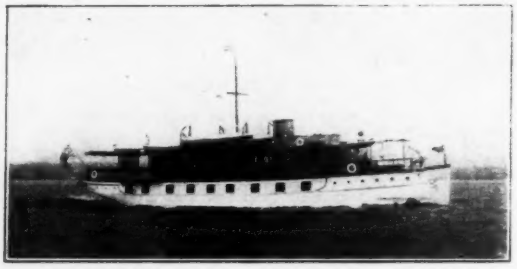
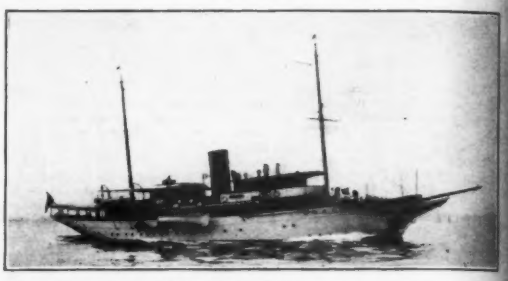
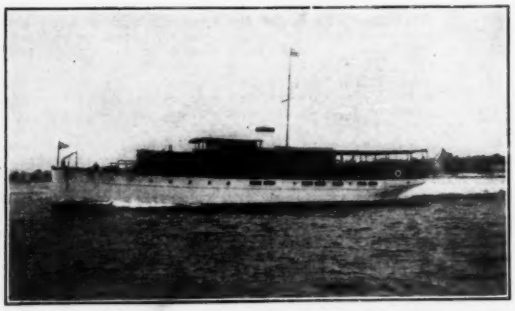


No. 4733—FOR SALE OR CHARTER—Modern twin-screw 93' Mathis houseboat. Speed up to 14 miles; two 6 cylinder 150 H.P. Winton gasoline motors. Accommodations consist of large combined living and dining room in deckhouse, three double, one single stateroom, three baths. Handsomely fitted and furnished. Excellent condition throughout. Price attractive. SEVERAL OTHERS THIS TYPE AVAILABLE FOR CHARTER FOR FLORIDA USE, BOTH LARGER AND SMALLER. Cox & Stevens, Inc., 521 Fifth Avenue, New York.



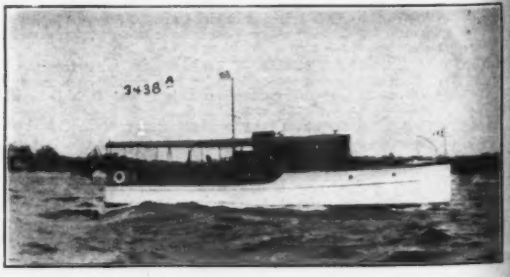
No. 5284—FOR WINTER CHARTER—Twin-screw 185' seagoing Diesel yacht. Speed 12 knots. Accommodations include large deckhouse containing dining saloon, galley, pantry, library and living room; below are six staterooms, each with connecting bath. Beautifully furnished and fitted with all modern conveniences. In commission, with excellent crew aboard. Further particulars upon request. Cox & Stevens, Inc., 521 Fifth Avenue, New York.



No. 5332—FOR SALE—Modern 85' cruising power yacht, new 1927. Two 6 cylinder 100 H.P. Twentieth Century engines. Speed 13-14 miles. Two double, two single staterooms, two baths and toilet rooms. Deckhouse contains dining saloon and living room. Spacious after deck 24' long. Opportunity to purchase a comparatively new boat at a very reasonable figure. Quick action necessary. Cox & Stevens, Inc., 521 Fifth Avenue, New York.

No. 5426—FOR SALE—Fast 65' twin-screw power yacht, built from our designs 1928. Two 6 cylinder 180 H.P. Winton gasoline motors; speed up to 23 miles. Large deckhouse containing combination lounging and dining saloon; double stateroom; shower bath and two toilets. Beautifully finished and furnished. Price and further particulars from Cox & Stevens, Inc., 521 Fifth Avenue. New York.

No. 5434—FOR SALE—Roomy, fast cruising power yacht; 94' long by 15' beam. Two 350 H.P. Winton motors; speed up to 17 miles. Large combined dining room and living room located in sunken deckhouse forward; below aft two double and two single staterooms, three baths and toilet rooms. Large deck space. Attractively finished and furnished. All modern conveniences. Hull double planked. Built from our plans and under our supervision. Price attractive for immediate sale. Cox & Stevens. Inc., 521 Fifth Avenue, New York.



No. 3438—FOR SALE—Bridge deck cruiser, 52' x 11' x 3'; Speedway powered to cruise at 14 miles. Owner's accommodations include two double staterooms and two toilet rooms. Sitting room in deckhouse. A splendid boat for North and South cruising. For further particulars inquire of Cox & Stevens, Inc., 521 Fifth Avenue, New York.

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